

FIGURE 1A

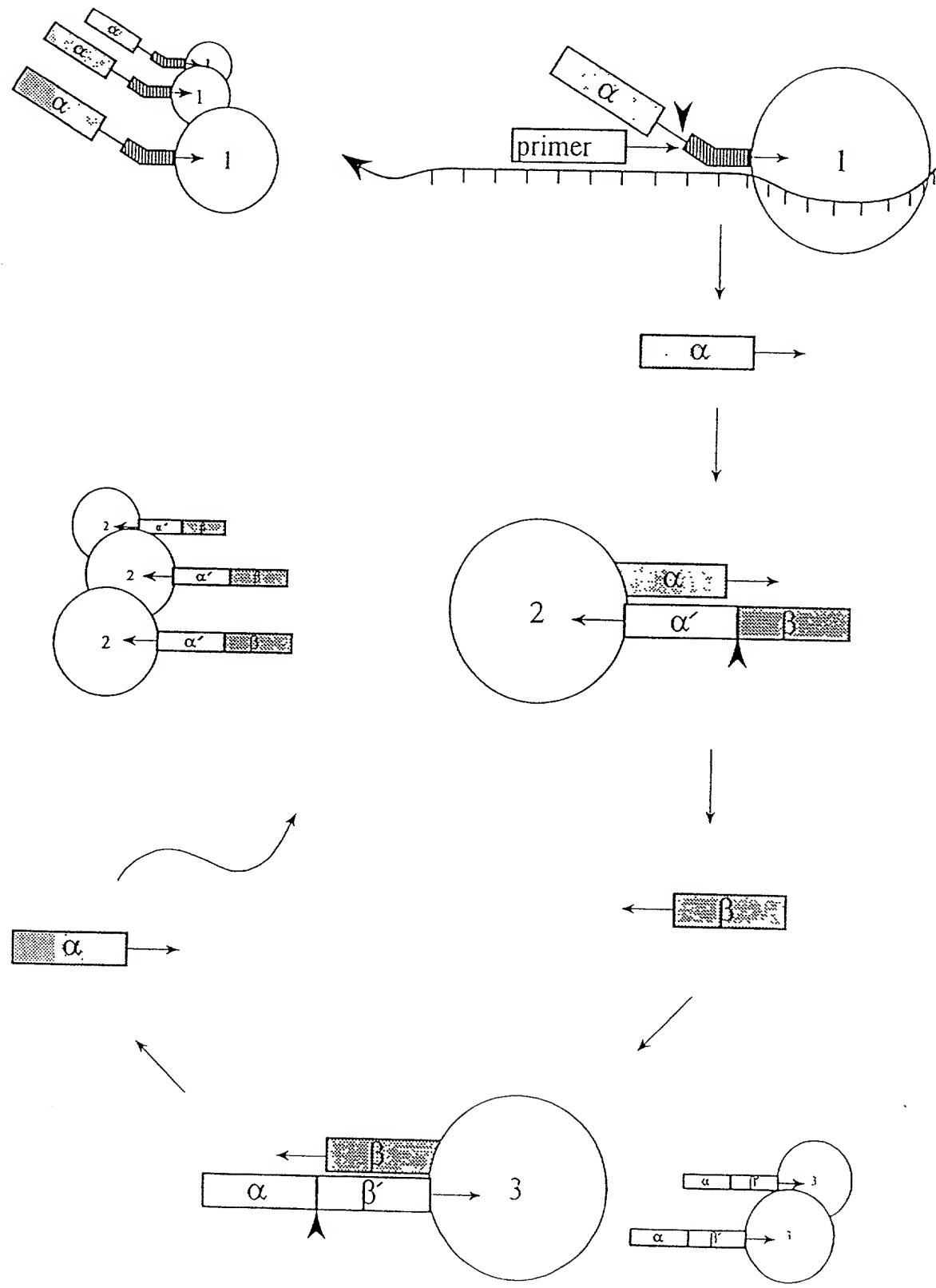
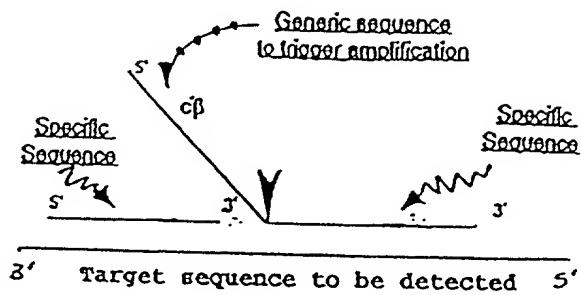


FIGURE 1B

PART ONE: TRIGGER REACTION



PART TWO: DETECTION REACTION

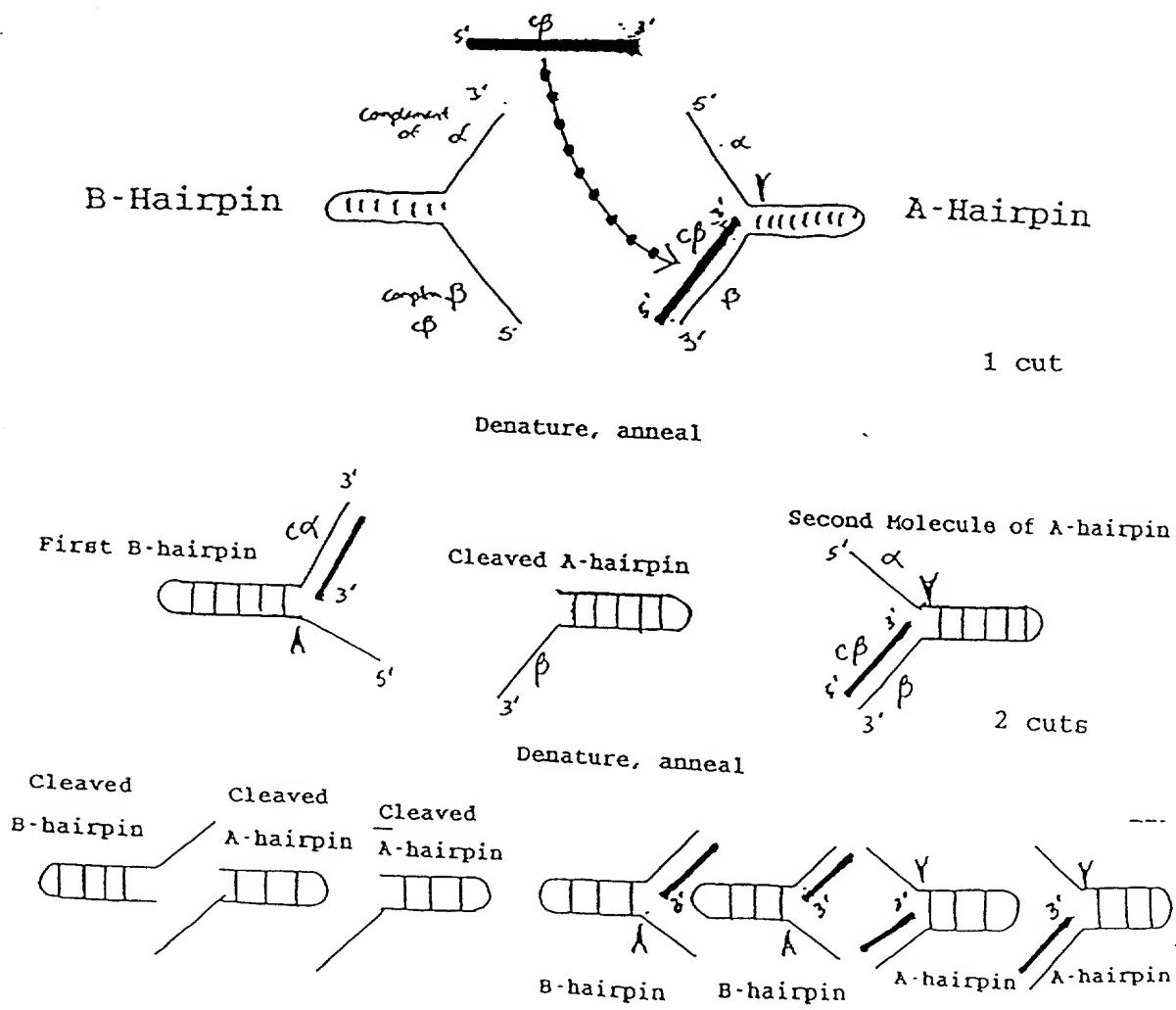


FIGURE 2

THE HISTORY OF THE CHURCH OF ENGLAND

FIGURE 2 (cont'd)

FIGURE 2 (cont'd)

FIGURE 2 (cont'd)

MAJORITY	(SEQ ID NO:7)	CGGGGXXCTCCGCCAAGGACCTGGCCGTTCGGCCCTGAGGGAGGGCTXGACCTCTGCCCGGGGACCG	
DNAPTAQ	(SEQ ID NO:1)	.....G.....T.....A.....AG.....C.....A.....T.G.....CC.....C.....	
DNAPTR	(SEQ ID NO:2)	.....AA.....G.....G.....G.....C.....G.....T.C.....A.A.....	1111
DNAPTH	(SEQ ID NO:3)	.....C.....G.....C.....C.....TC.....G.....A.....G.....	1120
MAJORITY		ACCCATGGCTGGCCTACCTCTGGACCCCTCCAACACCACCCCCAACGGGGCTGGGGGGCTACGG	
DNAPTAQ		.....T.....T.....T.....T.....T.....T.....	1184
DNAPTR		.....G.....T.....T.....T.....T.....T.....	1181
DNAPTH		.....G.....G.....G.....G.....G.....G.....	1190
MAJORITY		GGGGGAGTGCAAGGAXGGGGGGGGGAGGGGGCTCCCTCCAGAGGGCTTCGXAACCTXXXXGGAG	
DNAPTAQ		.....G.....T.....A.....GG.....T.....GG.....GG.....	1254
DNAPTR		.....T.....A.....G.....C.....C.....A.....	1251
DNAPTH		.....C.....C.....CCC.....C.....G.....CAT.....G.....	1261
MAJORITY		CGCCCTTGAAGGGAGGAAGGGCTCCCTGGCTTACCAAGGAGCTGGAGAACCCCTTCCCCGGCTCTGG	
DNAPTAQ		.....A.G.....A.....AC.....C.....G.....G.....G.....	1324
DNAPTR		.....A.....A.....AC.....C.....G.....G.....G.....	1321
DNAPTH		.....C.....A.....G.....C.....A.....A.....C.....	1330
MAJORITY		CCCACATGGAGGGACCCCCCTXGGGCTGGACCTGGCCCTACCTCCAGGGCTTCCCCCTGGGGCA	
DNAPTAQ		.....G.....C.....T.....AG.....T.G.....G.....	1394
DNAPTR		.....GG.....C.....C.....A.....C.....A.....	1391
DNAPTH		.....G.....A.....T.....T.....C.....T.....	1400.

FIGURE 2 (cont'd)

FIGURE 2 (cont'd)

FIGURE 2 (cont'd)

MAJORITY (SEQ ID NO:7)	AGCTTCCCCAAGGTGGGCTGATTGAGAACCCCTGGAGGGGGGTACCTGGAGAA			
DNADTAQ (SEQ ID NO:1)	.....	.....	.....	2164
DNADTR (SEQ ID NO:2)	.....A.	.....C.	.....C.	2161
DNADTH (SEQ ID NO:3)	.....A.	.....G.	.....G.	217
MAJORITY	CCCTCTTCCCCCCCCGCTAGGTGCCCGACCTCAACCCCCCTGAAGAGCGTGGGGAGGGGGAA			
DNADTAQ	.....C.	.....A.	.....A.G.	2234
DNADTR	.....T.	.....T.	.....C.	2231
DNADTH	.....AA.	.....AA.	.....CA.	2240
MAJORITY	GGCCATGGCCTTCAACATGGCCGTCAGGGCACCCGACCTCATGAAGCTGCCATGGTGAAGCTC			
DNADTAQ	.....	.....	.....T	2304
DNADTR	.....G.	.....G.	.....GG	2301
DNADTH	.....	.....	.....C.	2310
MAJORITY	TTCCCCCGGCTXCAAGAAATGGGGCAGGATGCTCCTXCAAGCTCACGACCTGGTCCCTGAGCCC			
DNADTAQ	.....A.	.....GG.	.....T	231
DNADTR	.....T	.....C.	.....G.	2371
DNADTH	.....C..C..G.	.....C..C..G.	.....CC..G.	2380
MAJORITY	CCAAAGACGGGGCGAGGXGGTGGCCGCTTGGCAAAGGAGGICATGGAGGGCTCTATCCCCCTGGGGGT			
DNADTAQ	.....A..A....	.....CC...CGGC.	.....G..GG.	2444
DNADTR	.....G..C...	.....AG..A...	.....GG..CAG.	2441
DNADTH	.....C..C...	.....C..A...	.....AA..C..G..C.	2450

FIGURE 2 (cont'd)

MAJORITY	(SEQ ID NO:7)	CCCCCTGGAGGTGGGGATGGGGAGACTGGCTCTCCCCAAGGACTAG
DNADPTQ	(SEQ ID NO:1)	.....A.....
DNADPR	(SEQ ID NO:2)	.....CC.....
DNADPTH	(SEQ ID NO:3)	.....T.....
		.....GA.....
		.....CC.....
		.....T.....
		.....GT.....
	

FIGURE 3

MAJORITY (SEQ ID NO:8) MXXAMLPLFEPKGRVLLVDGHHLAYRTFFALKGLTSRGEPVQAVYGFAKSLLKALKEDG· DAVXVVFDAAK		
TAQ PRO (SEQ ID NO:4)	R G	H
TR PRO (SEQ ID NO:5)	. . . . .	. . . . .
TH PRO (SEQ ID NO:6)	E	Y K . . F
 MAJORITY		
APSFRHEAYEAYKAGRAPTPEDFPROLALIKELV DLL GLXRL EUPGYEADDV L A KKA EKE G YEV RIL		
TAQ PRO	GG	A
TR PRO	. . . . .	V
TH PRO	. . . . .	F T
 MAJORITY		
TADRDLYQQLSDRIAVLHPEGYLITPAWLWEEKYGLRPEQWWDYRALXGDPSDNLPGVKGIGEKTA KLLX		
TAQ PRO	K	H
TR PRO	E . . I . . .	Y
TH PRO	V	H
 MAJORITY		
EWGSLENLLKNLDKVKP· XXREKIXAHMEDI XLSSXVRTDLPLEVDFAXRREPDRCLRAFLERLEF		
TAQ PRO	A	A I
TR PRO	F Q H . . Q . . .	S I . . L Q . G . A . A . . R K . . Q . H . . .
TH PRO	E H V	K . . L . . R . . L E . . R . . .
 MAJORITY		
GSLLHEFGGLEXPKALEEAPWPPPEGA F V G F V L S R P E P M H A E L L A A A R X G R V H R A X D P L X G L R D L K E V		
TAQ PRO	S	K
TR PRO	G . . A	L . S F
TH PRO	A . A P	K . . C . D

//

FIGURE 3 (cont'd)

MAJORITY (SEQ ID NO:8)	RGLLAKOLAVLALRECLDLXPDDPMLLAYLLDPSNTTPEGUARRYGGWEHTEDAGERALLSERLFXNLXX		
TAQ PRO (SEQ ID NO:4)	S.....S.....G.....P.....	E.....A.....A.....A.....A.....	YG.....
TR PRO (SEQ ID NO:5)	I.....F.....E.....	A.....A.....QT.....KE.....	
TH PRO (SEQ ID NO:6)	S.....V.....	AH.....HR.....LK.....	420
MAJORITY	RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYLQALSLEVAEEIRRLEEEVFLAGHPFNLHSRD		
TAQ PRO	R...R...A...R...A...	R...A...A...	488
TR PRO	K...E...R...R...	EA..V..Q...	487
TH PRO	K...H...	L...	490
MAJORITY	QLERVLFDDELGLPAIGKTEKIGKRSTSSAAVLEALREAHPIIVEKLILQYRELTKLKNNTYIDPLPPXLVHPRTG		
TAQ PRO	.....	S.....D.....I.....	558
TR PRO	.....	DR.....A.....K.....	557
TH PRO	R...L...Q...	H.....V.....S.....	560
MAJORITY	RLHTRFNQATATGRLSSSDPNLQNI PVRTPLGQRI RRAFVAEGWXLVALDYSQIELRVLVLAHLSGDENL		
TAQ PRO	.....	I.....L.....	628
TR PRO	.....	V.....V.....	627
TH PRO	.....	A.....A.....	630
MAJORITY	IRVFQEGRDQIHQTASWMMF GUPPEAVDPLMRRAAKTI NFGVLYGMSAHRLSQELAI PYEEAVAFIERYFO		
TAQ PRO	E.....R.....	Q.....	698
TR PRO	S...G.....	G.....S.....	697
TH PRO	K.....	V.....	700

17

FIGURE 3 (cont'd)

MAJORITY (SEQ ID NO:8)	S F P K V R A W I E K T L E E G R R R G Y V E T T F G R R R Y V P O L N A R V K S V R E A E R M A F N M P V Q G T A A D L M K L A M V K L
TAD PRO (SEQ ID NO:4)	.....
TRL PRO (SEQ ID NO:5)	Y.....G.....
TMH PRO (SEQ ID NO:6)	.....K.....
.....	
MAJORITY	F P R L X E M G A R M L L O V H D E L V L E A P K X R A E X V A A L A K E V M E G Y P L A U V P L E V V G X G E D W L S A K E X
TAD PRO	.....E.....
TRL PRO	.....Q.....L.....
TMH PRO	.....R.....L.....
.....	
	E.....A.....R.....
	D.....R.....
	L.....Q.....A.....
	M.....E.....A.....K.....

	G.....

FIGURE 4

Genes for Wild-Type and Pol(-) DNAP-Taq

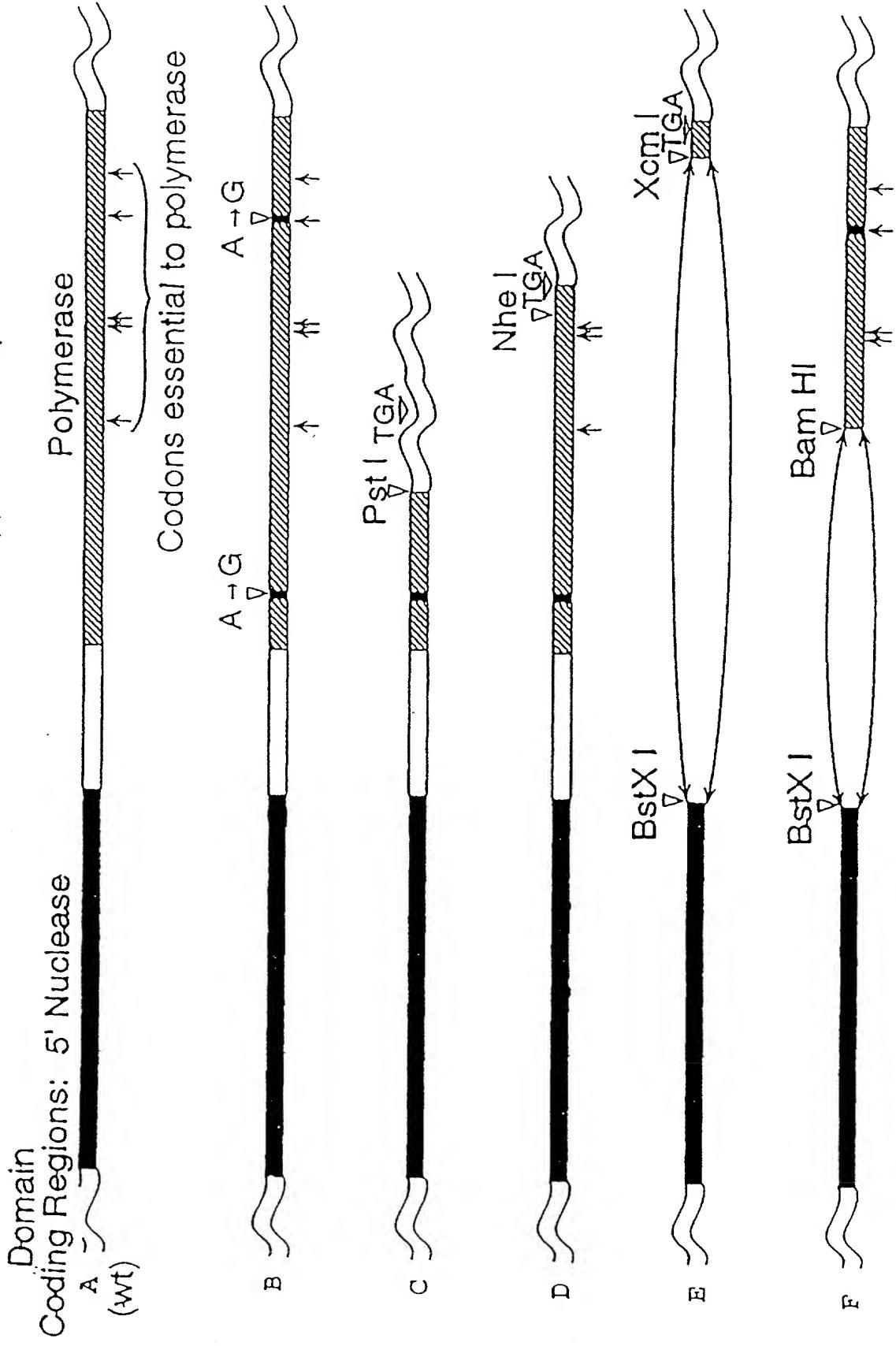


FIGURE 5

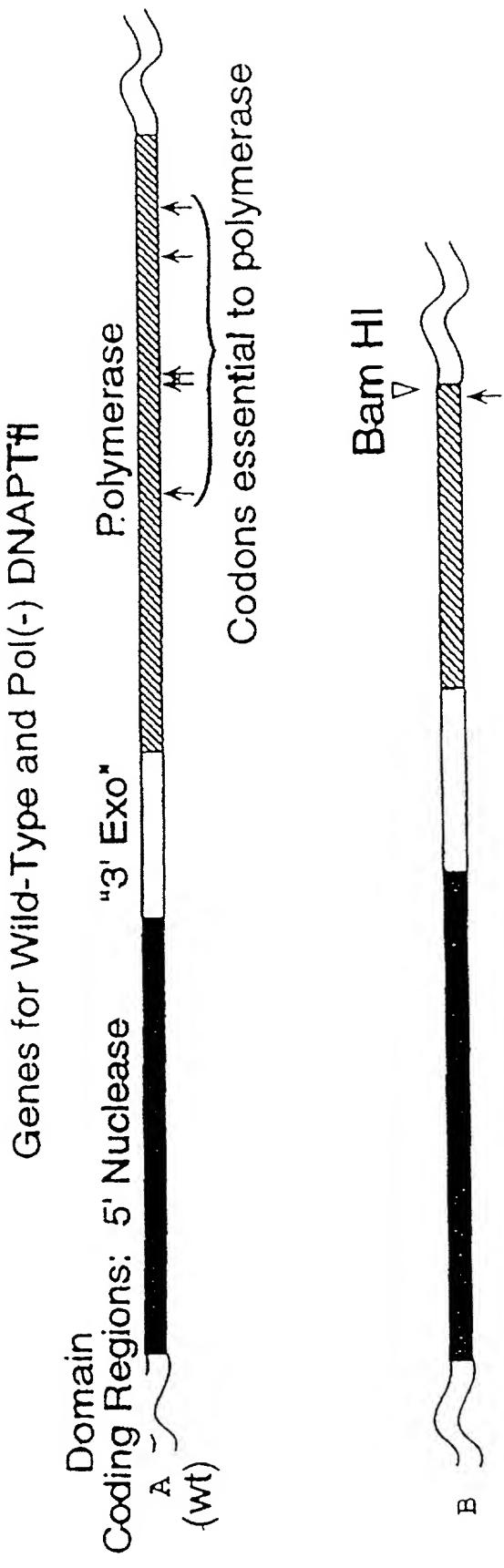


FIGURE 6

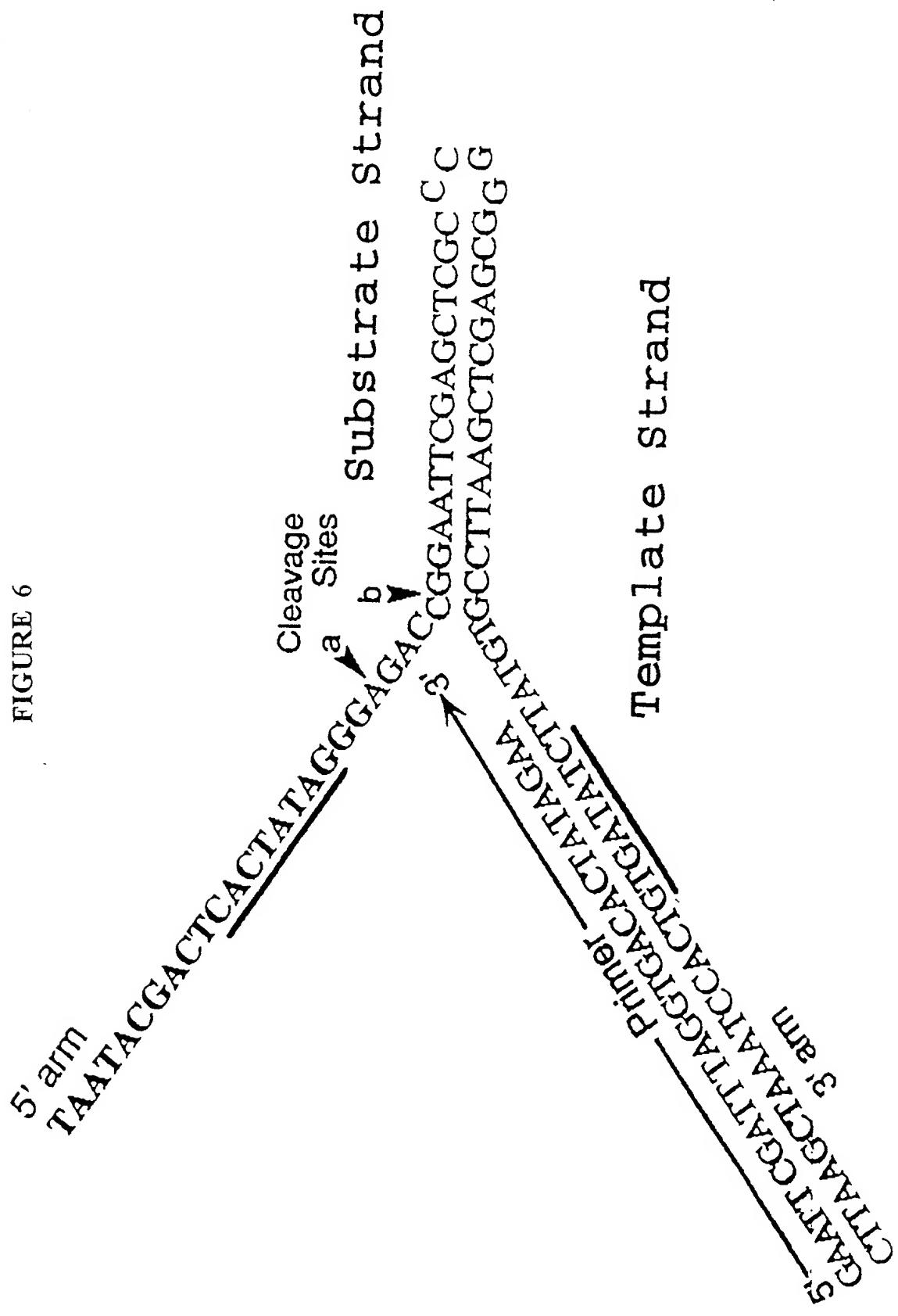


FIGURE 7



FIGURE 8

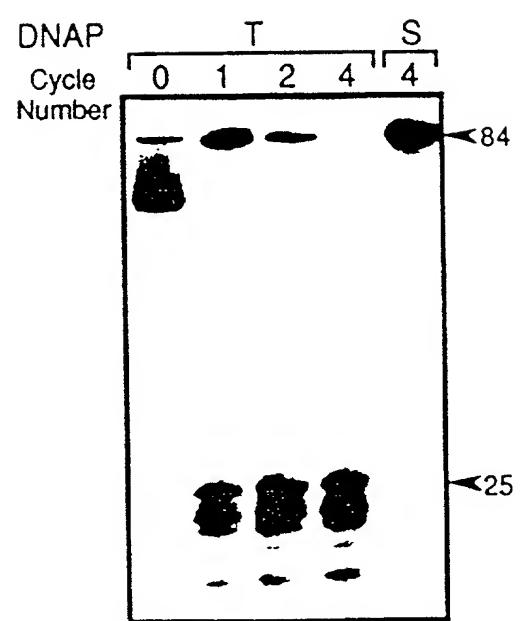


FIGURE 9

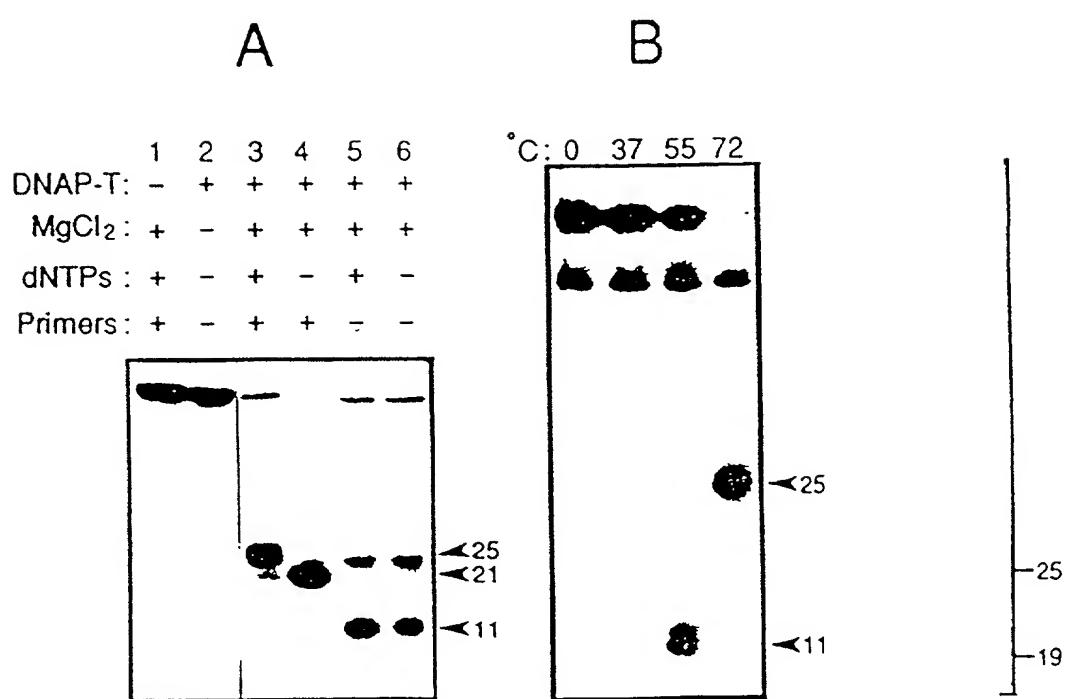
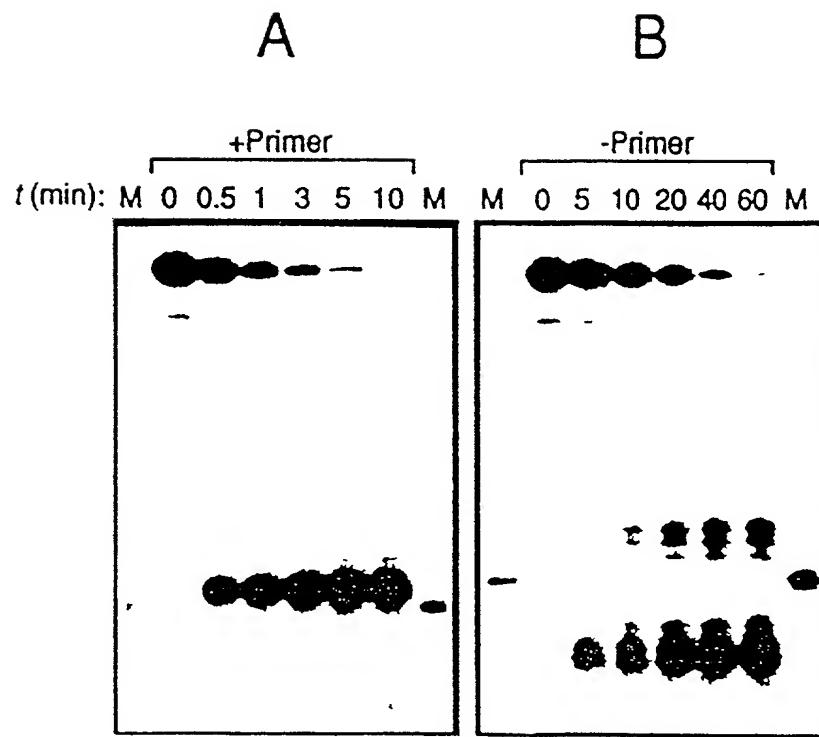


FIGURE 10



20

FIGURE 11

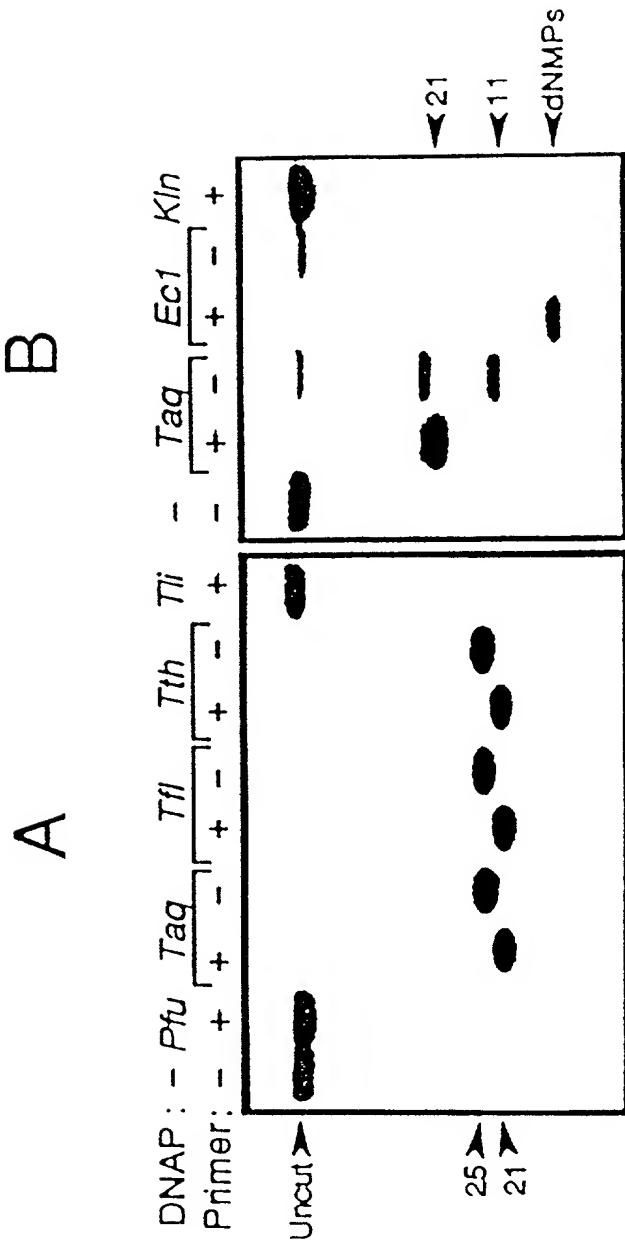
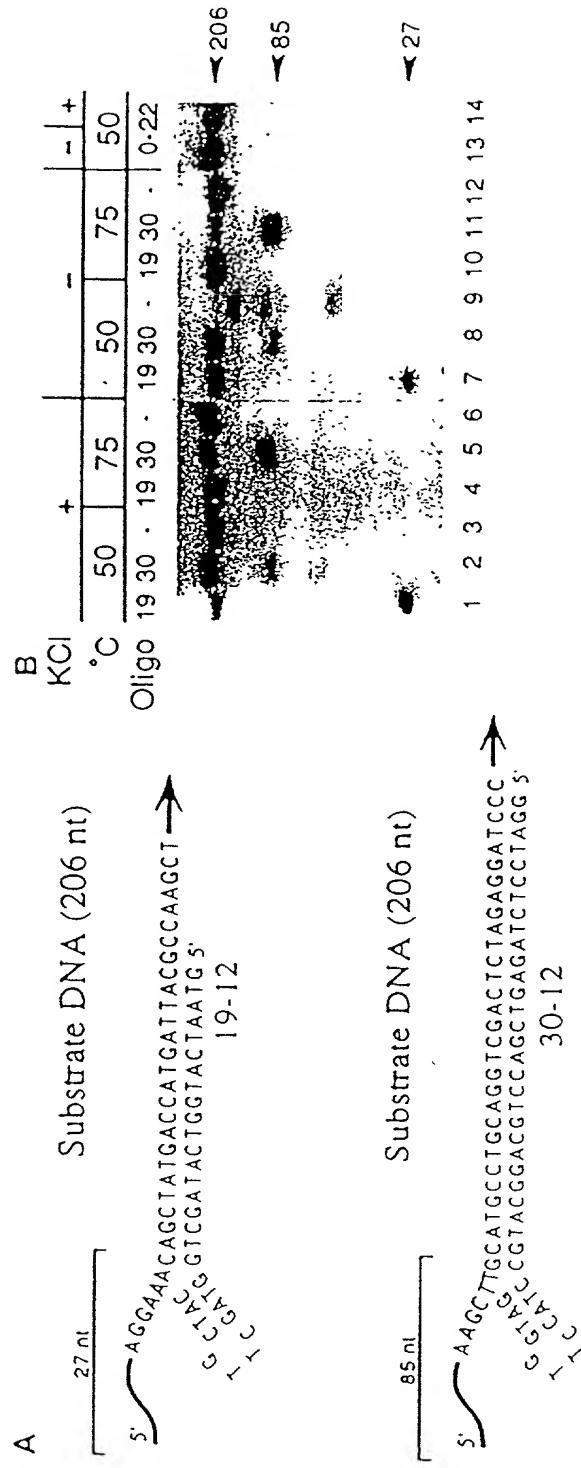


FIGURE 12



22

21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

FIGURE 13

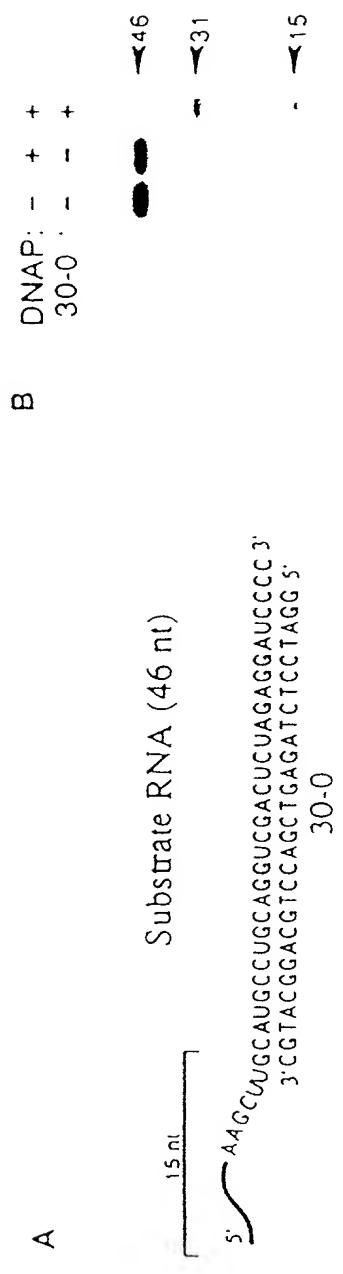
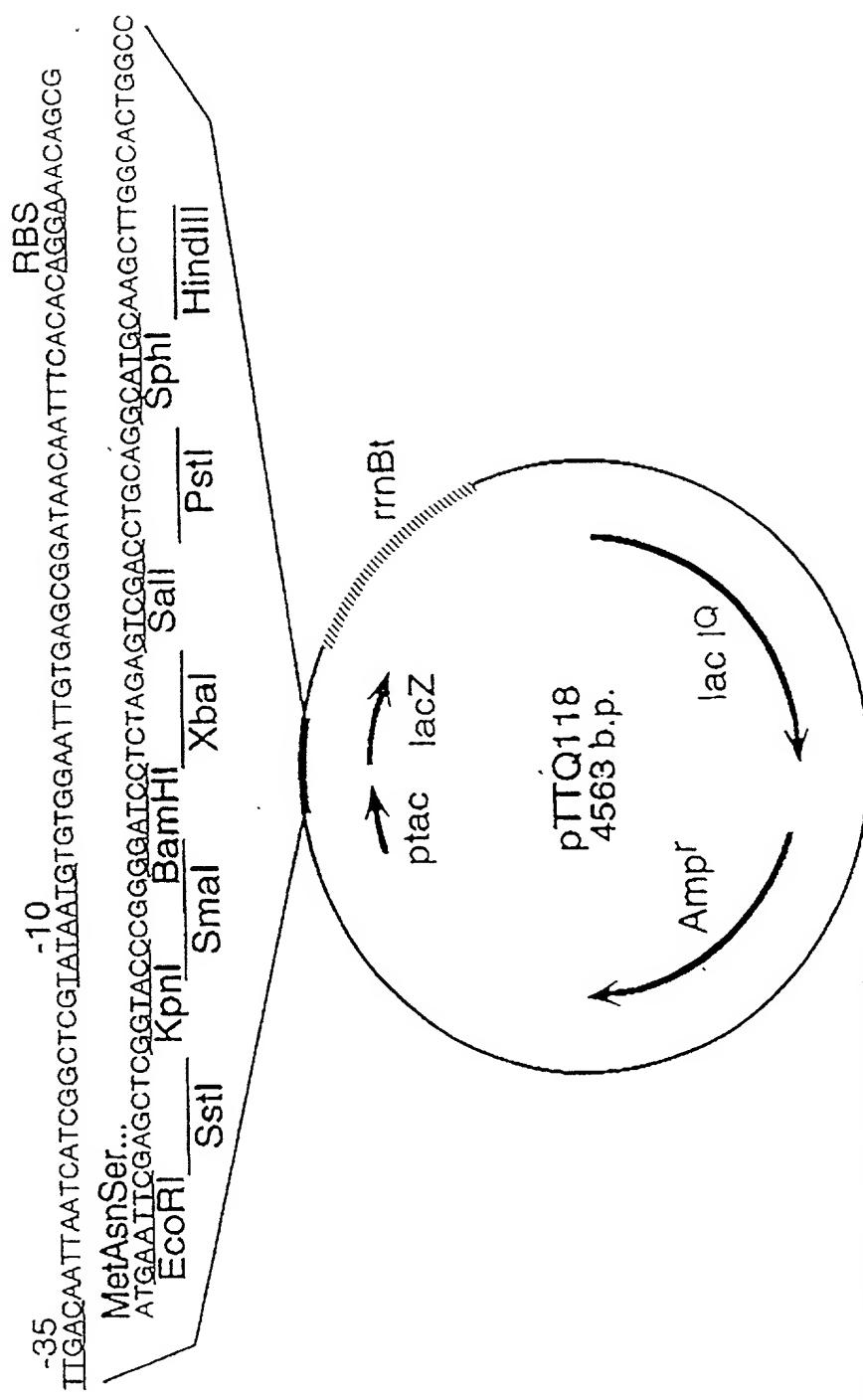


FIGURE 14



RBS: Ribosome binding site

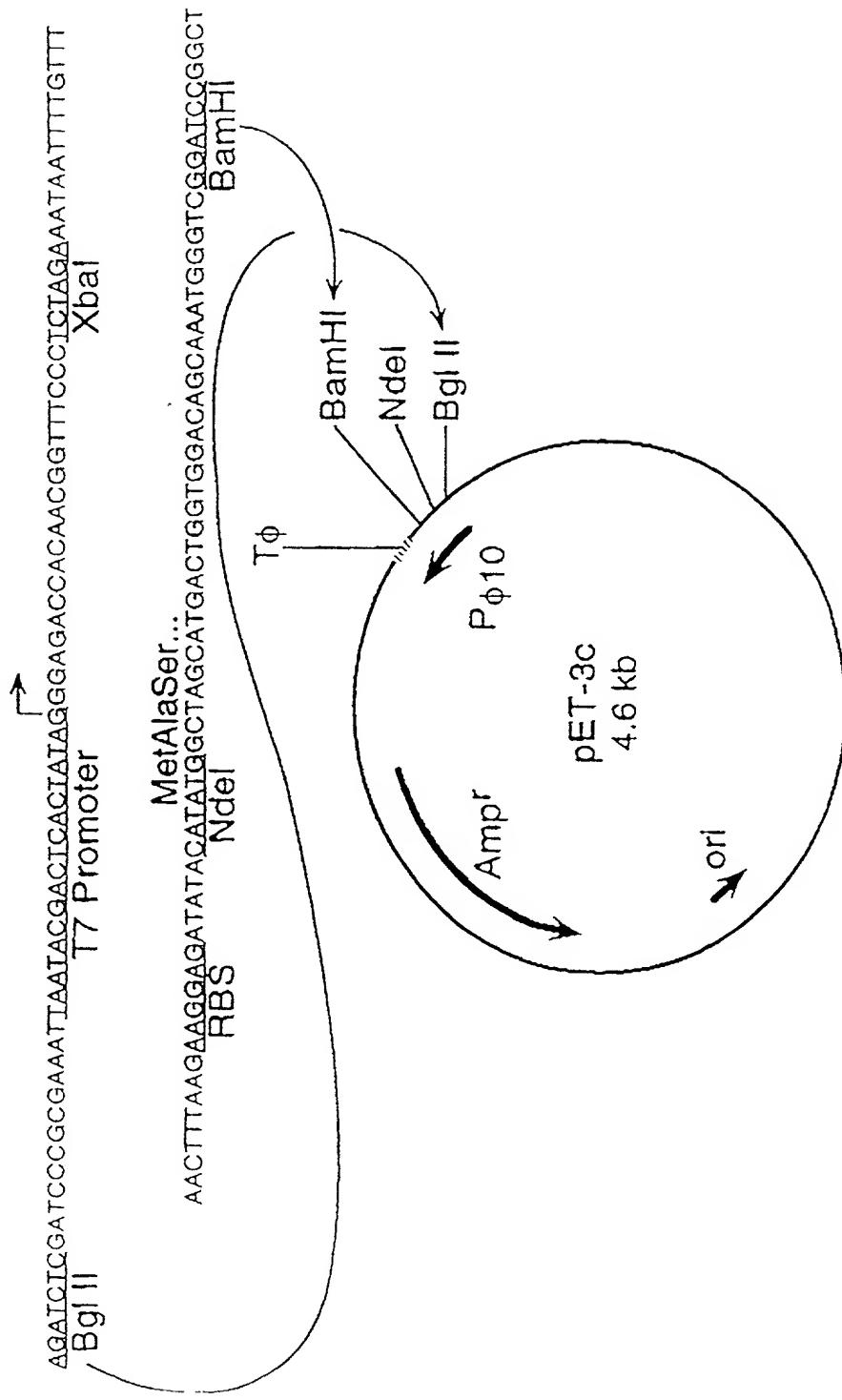
ptac: Synthetic tac promoter

lacIQ: Lac repressor gene

lacZ: Beta-galactosidase alpha fragment

rrnBt: E. coli rrnB transcription terminator

FIGURE 15



$P_{\Phi 10}$: Bacteriophage T7 $\phi 10$ promoter
 T_{Φ} : T7 ϕ Terminator
RBS: Ribosome binding site

FIGURE 16

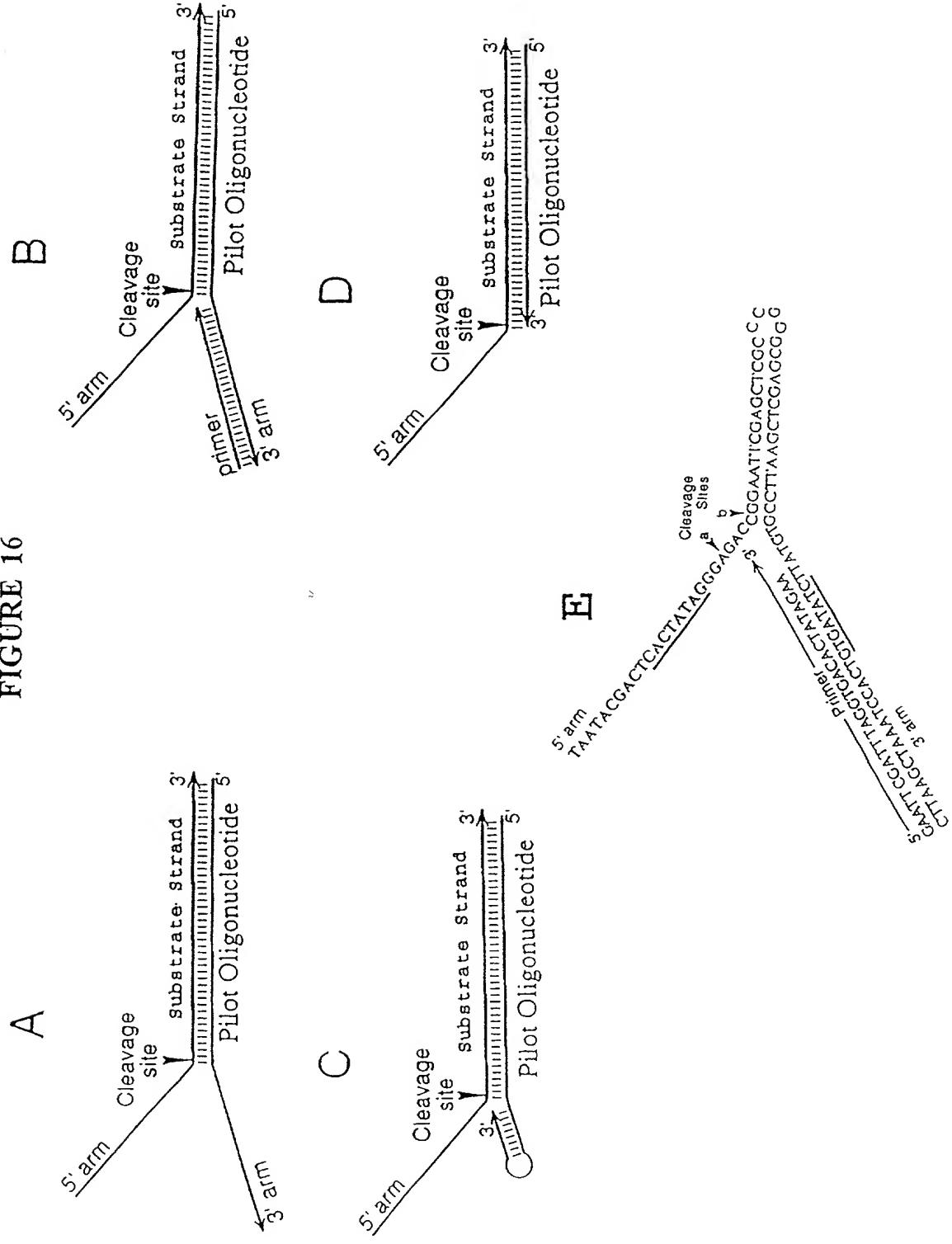


FIGURE 17

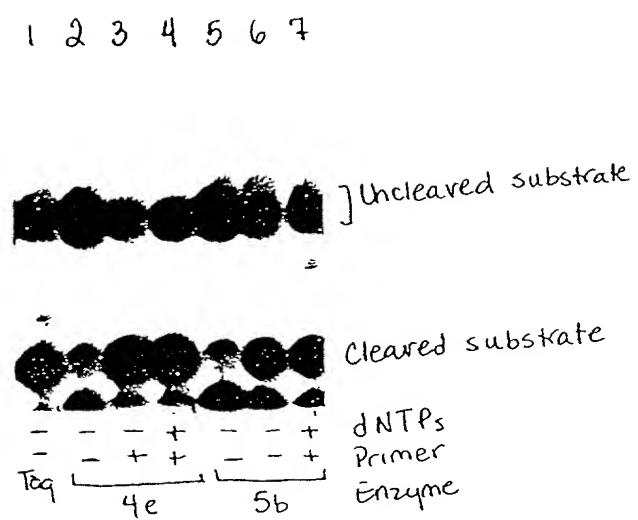


FIGURE 18

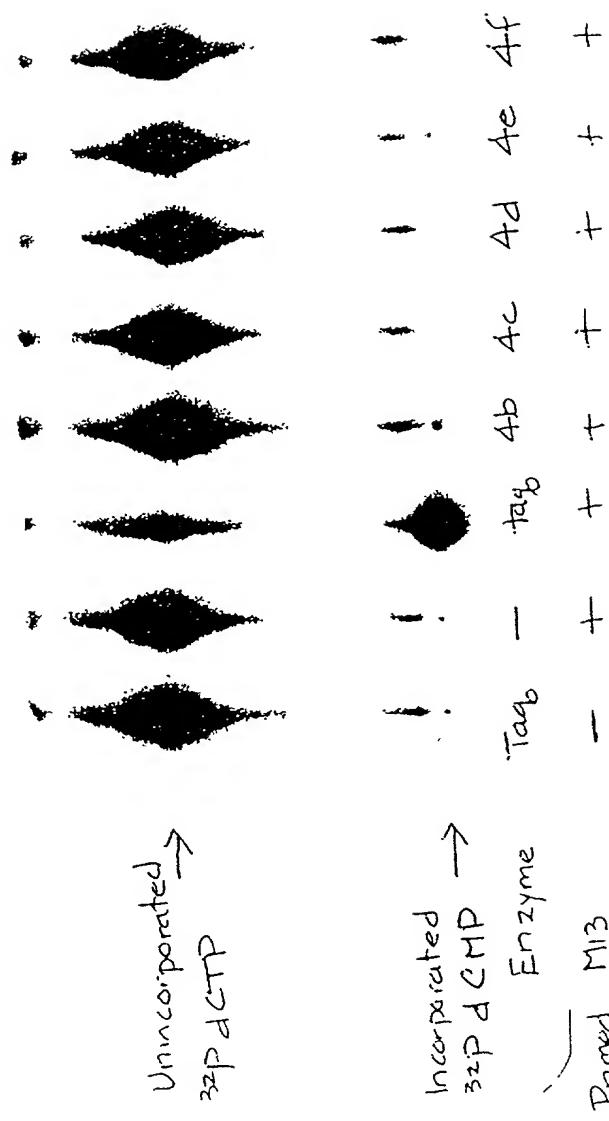
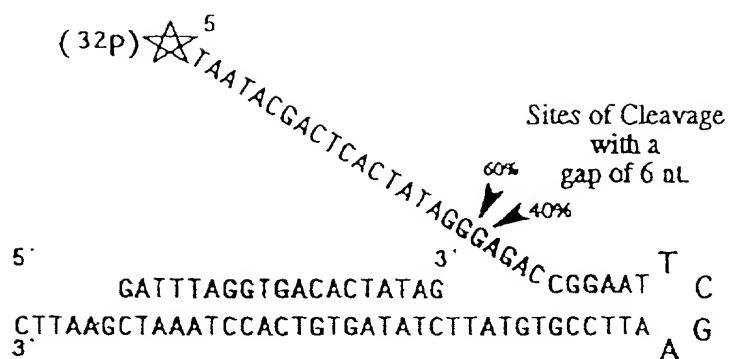


FIGURE 19

A



B

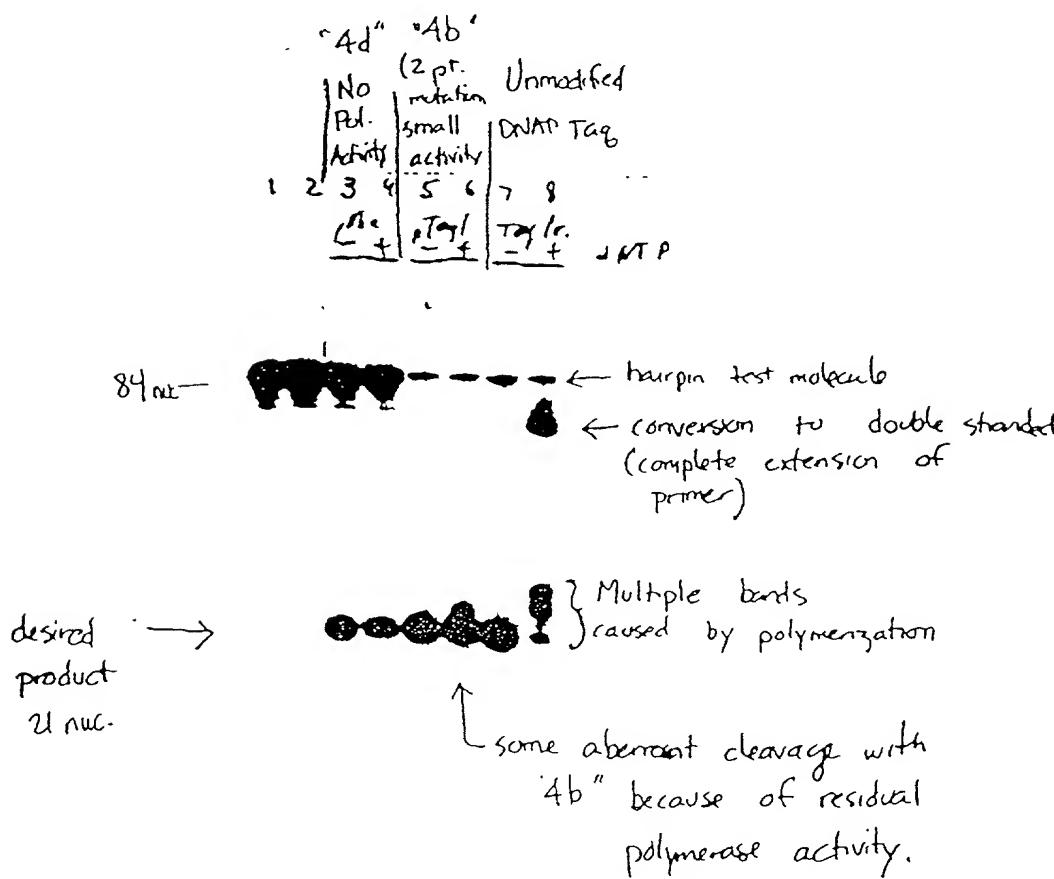
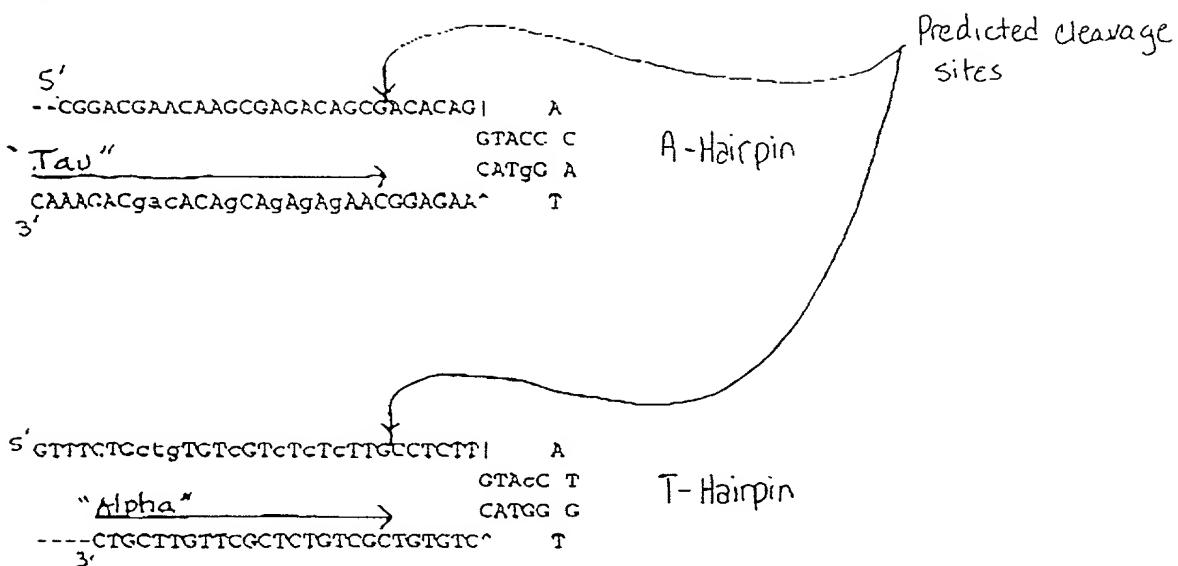


FIGURE 20

A

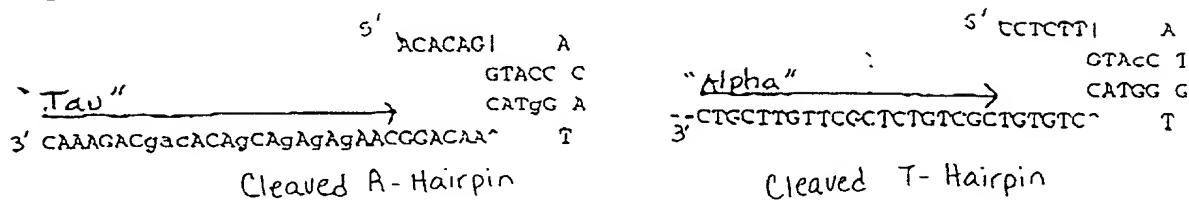


B

Sequence of alpha primer:

5' GAC GAA CAA CGG AGA CAG CG 3'

C



D

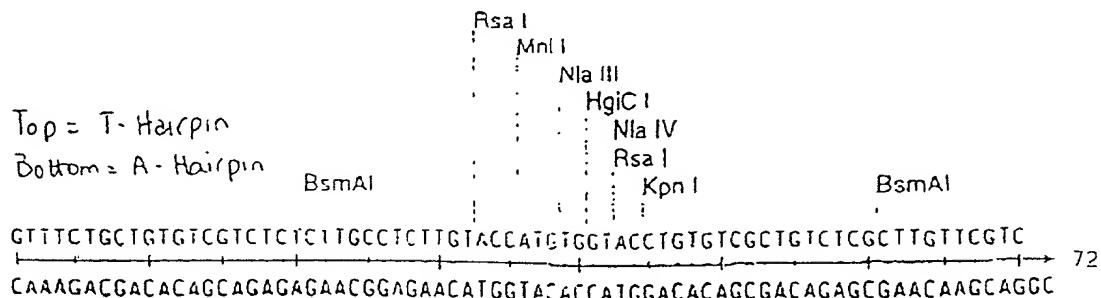


FIGURE 21

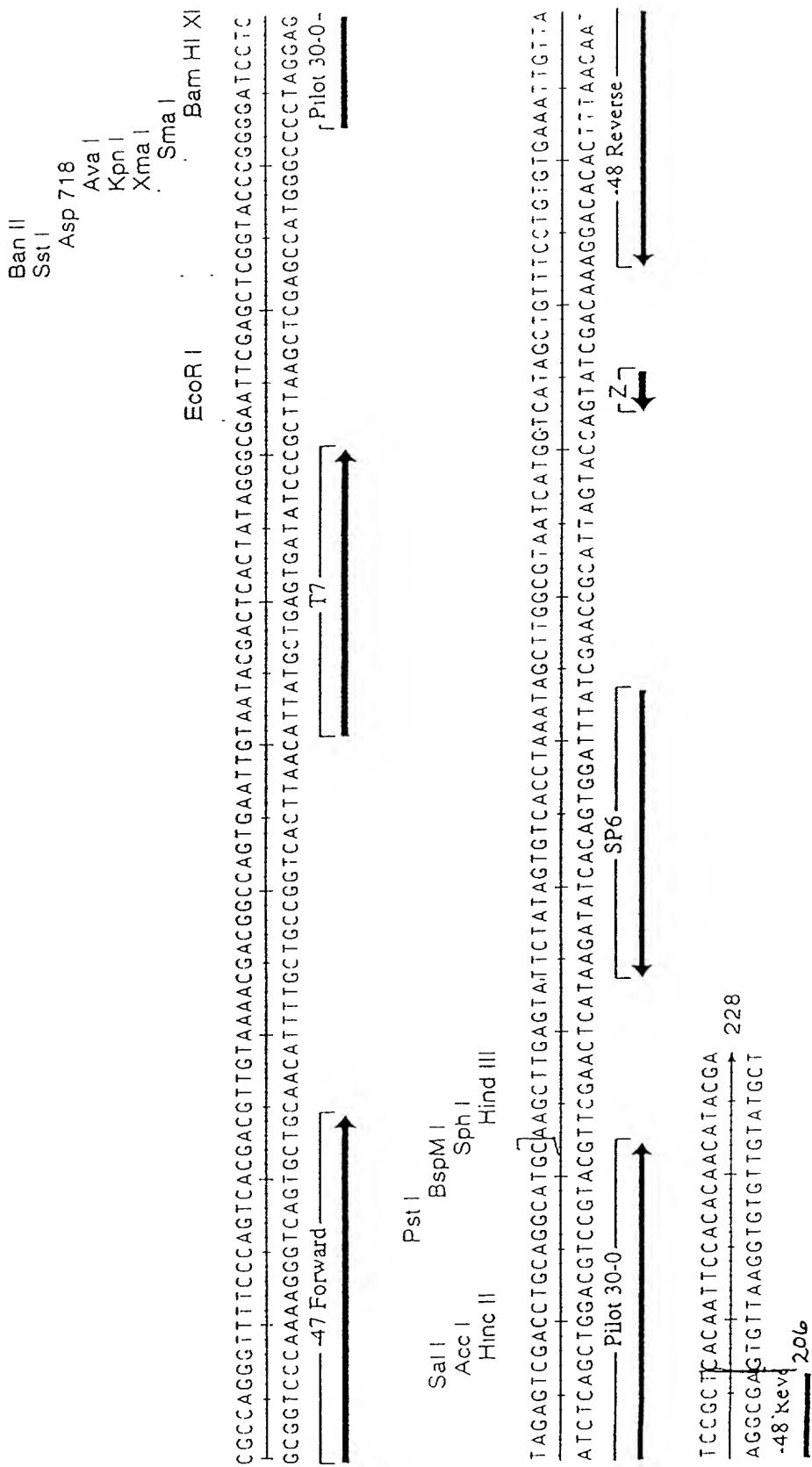
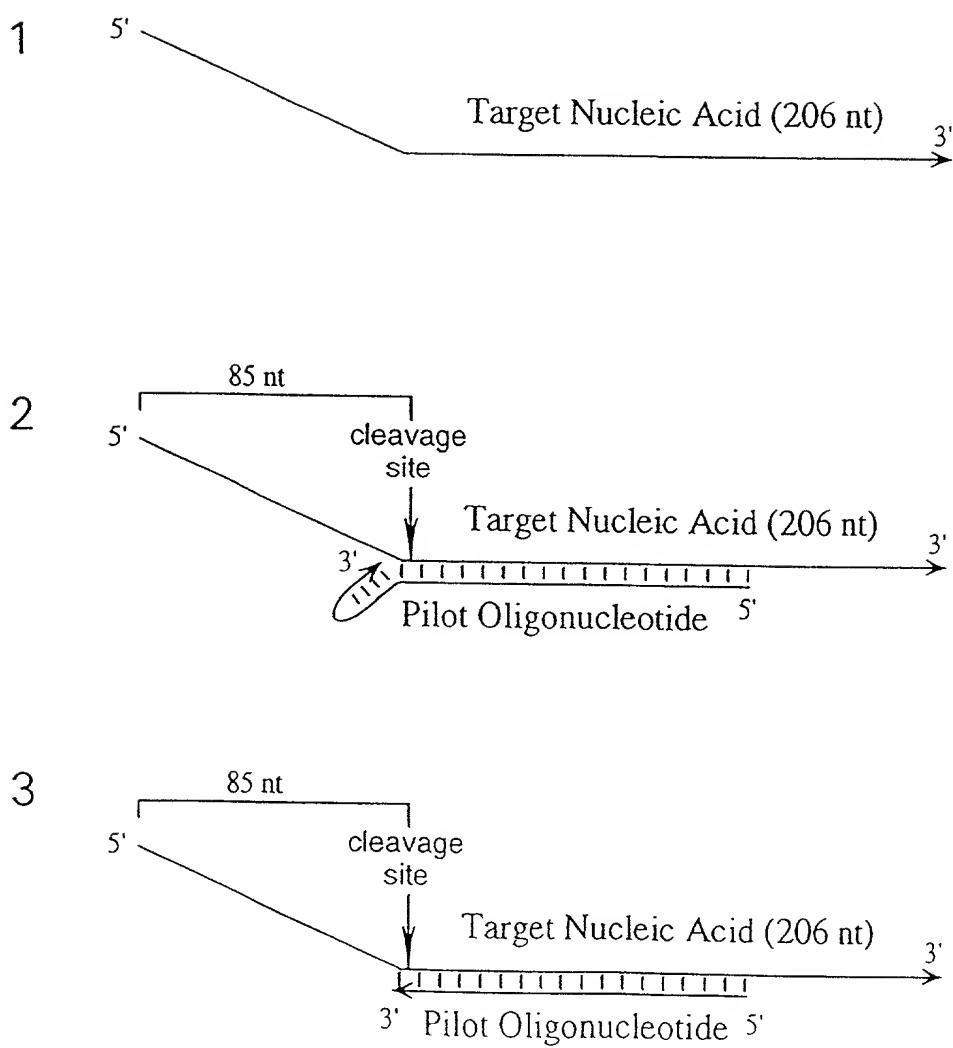
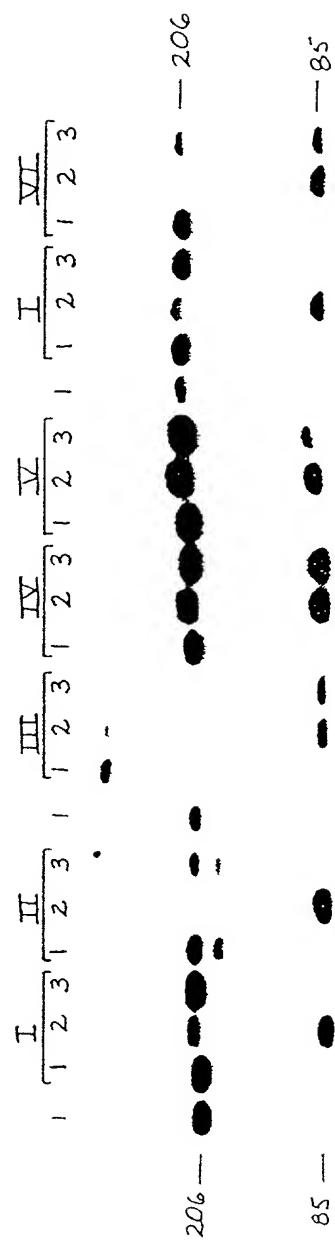


FIGURE 22A



3)

FIGURE 22B



2020 " 20 " 20 " 20 " 20 " 20 "

FIGURE 23

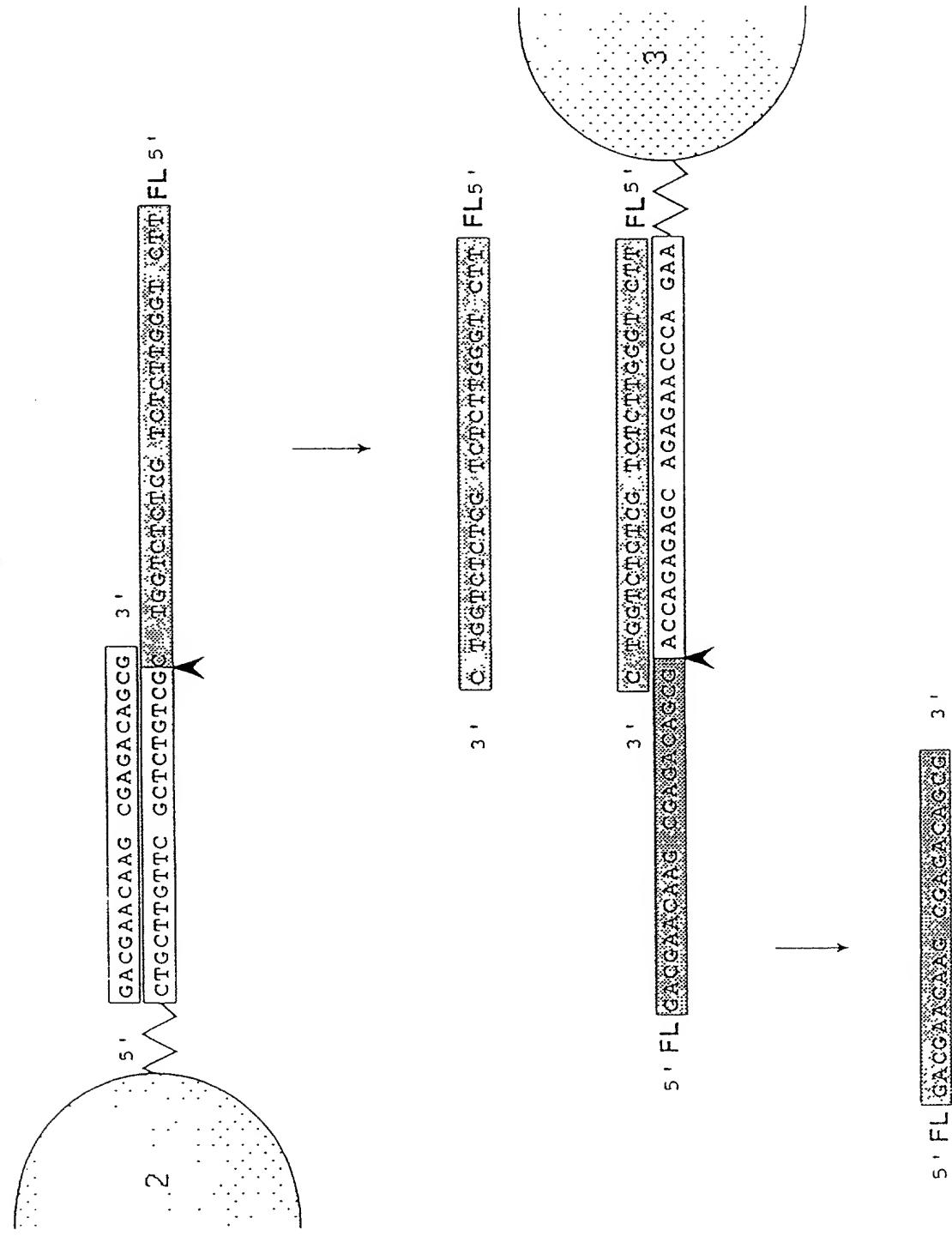


FIGURE 24

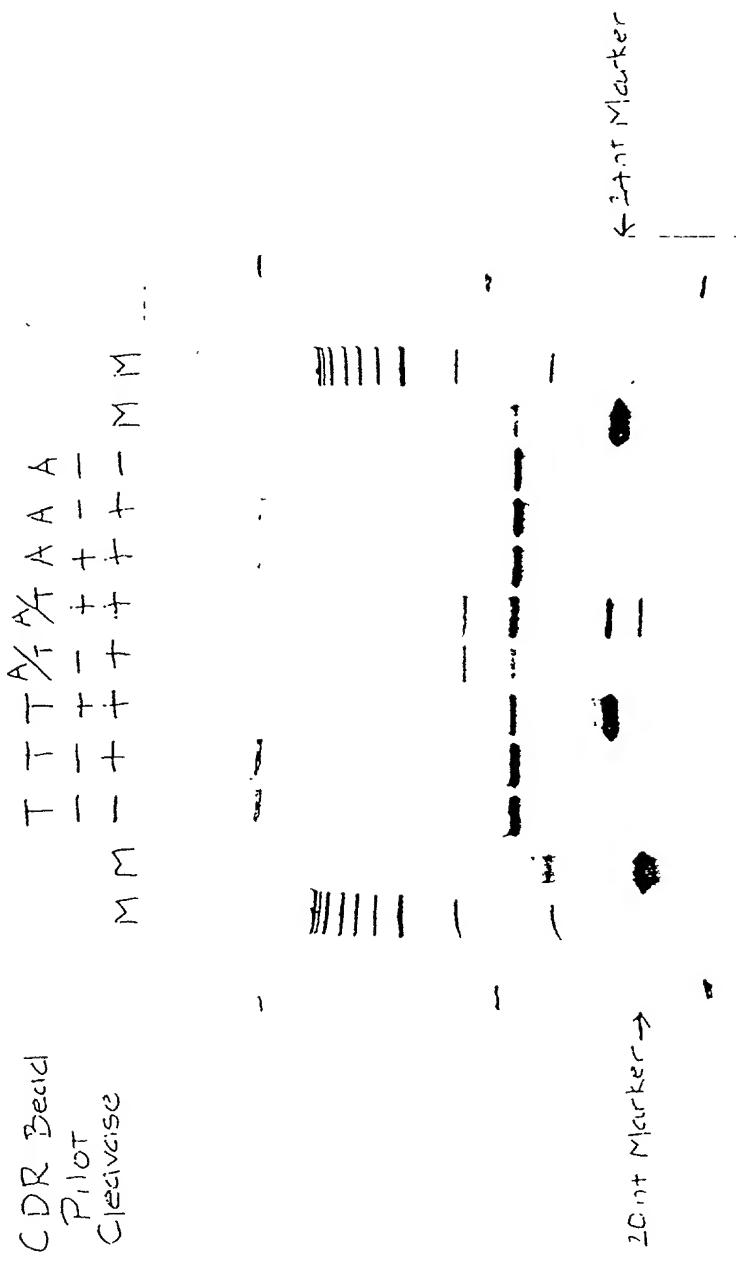
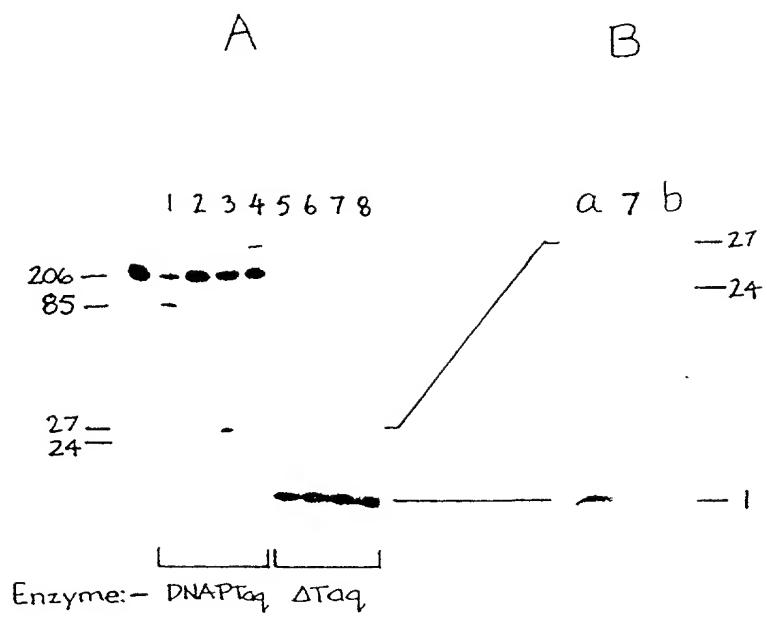


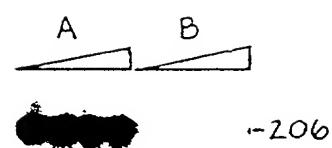
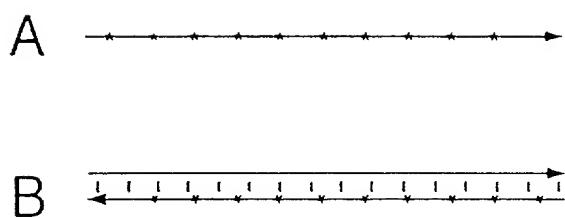
FIGURE 25



— P_i

1000 800 600 400 200

FIGURE 26



$$* = {}^{32}\text{P}$$

FIGURE 27

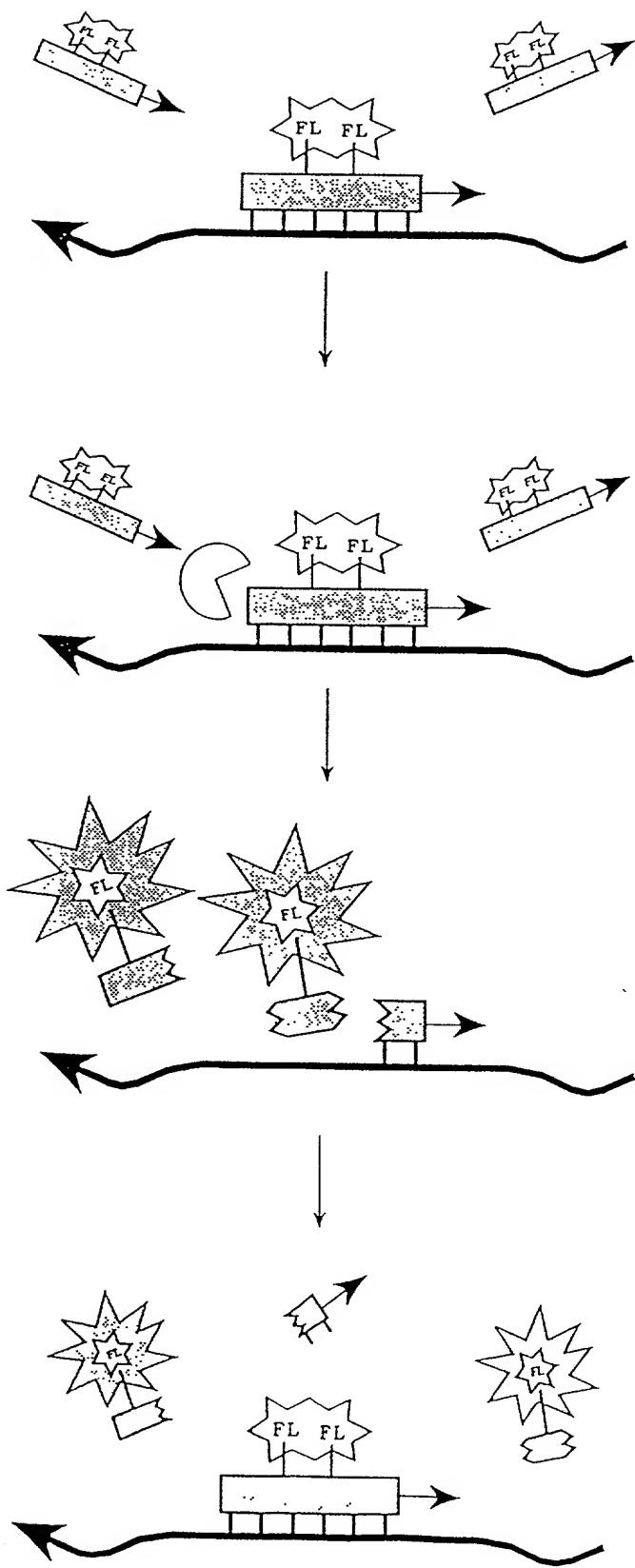
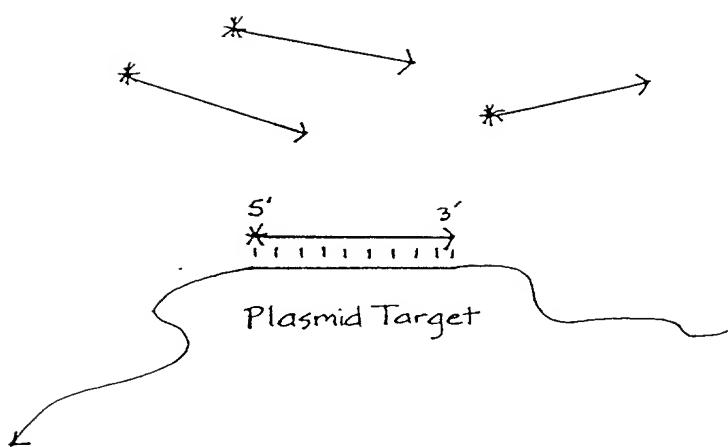
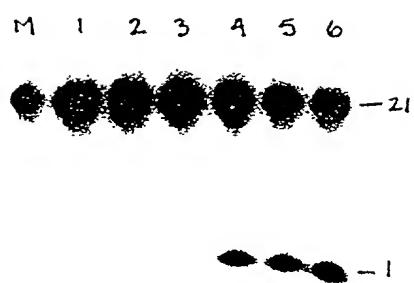


FIGURE 28A



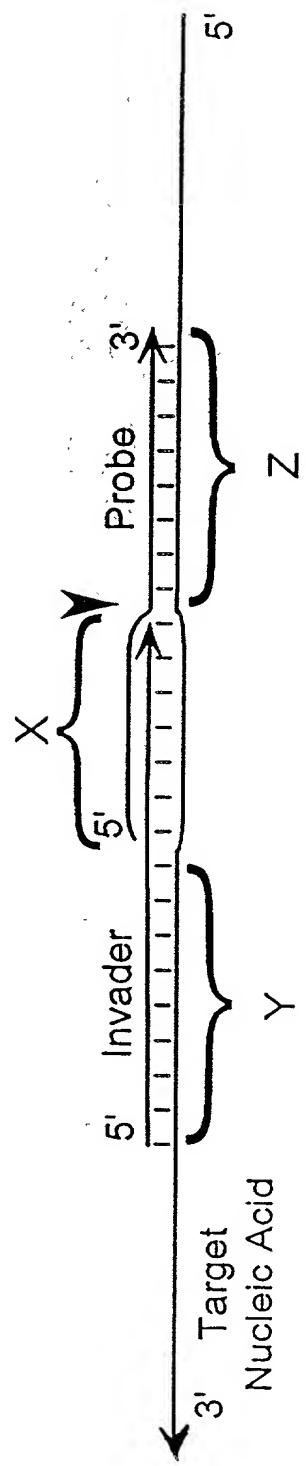
* = ^{32}P 5' terminal phosphate

FIGURE 28B



40

FIGURE 29



41

FIGURE 30

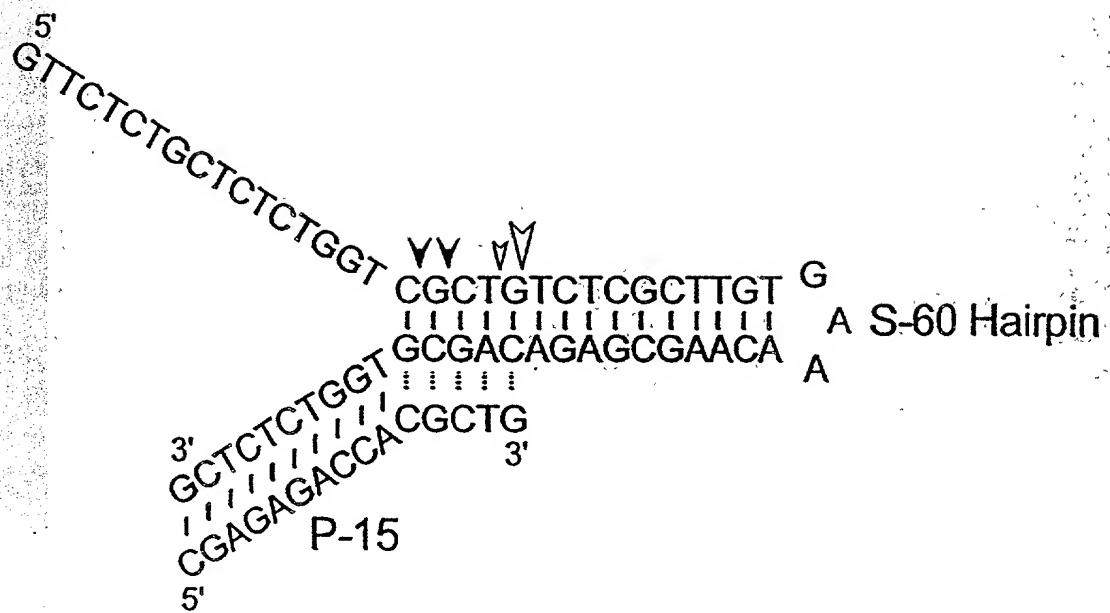
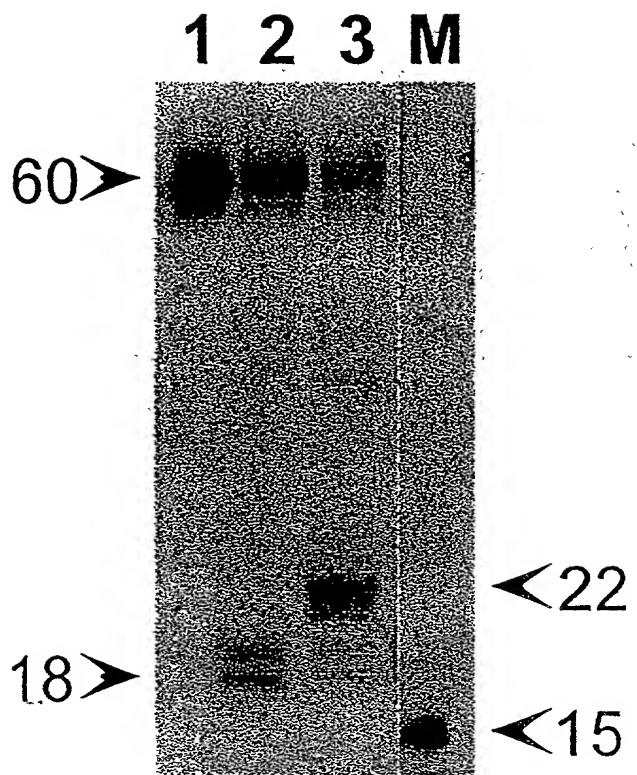
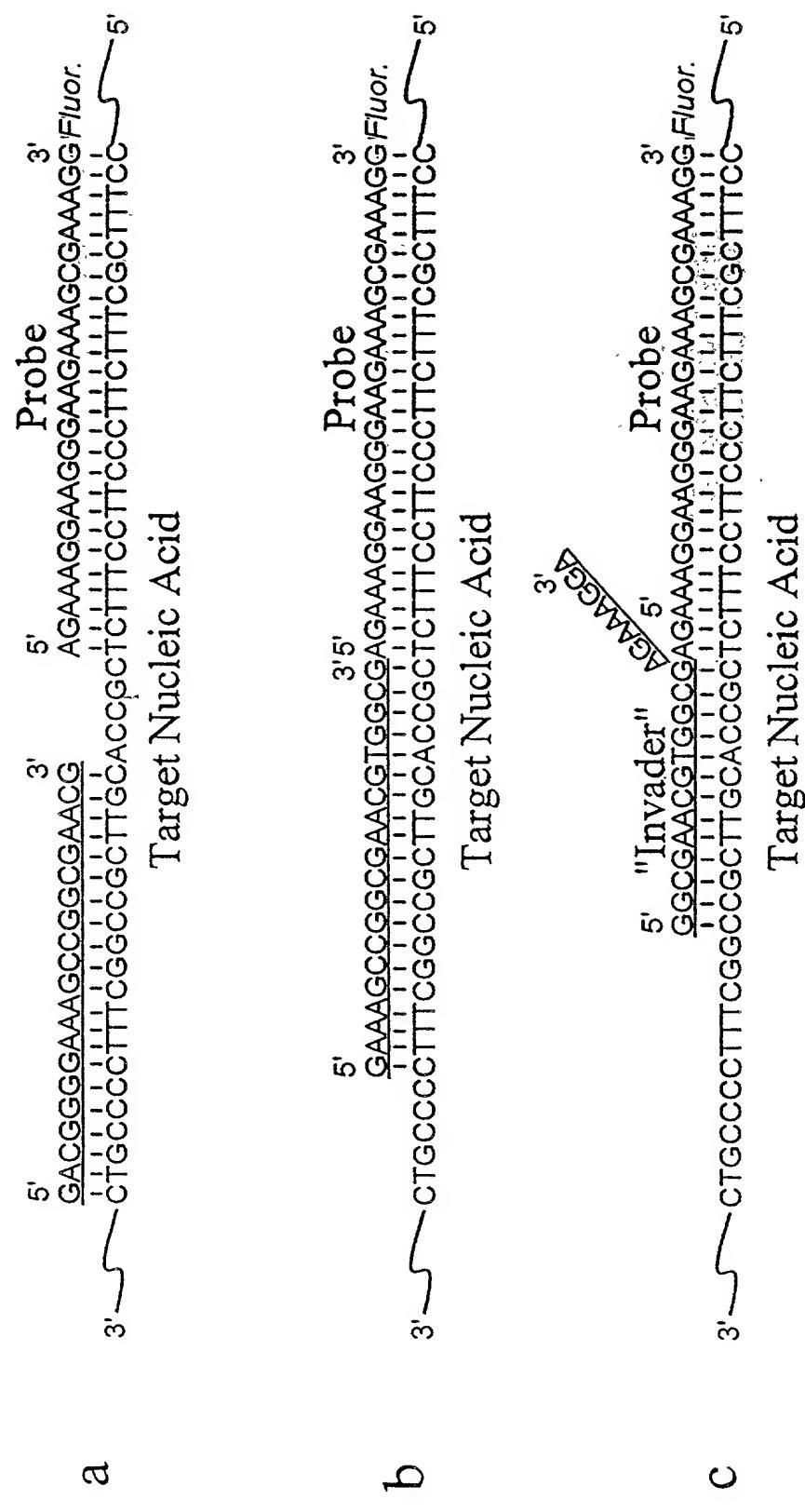


FIGURE 31



43

FIGURE 32



2021年“走出去”指数

8

7

6

5

4

3

2

1

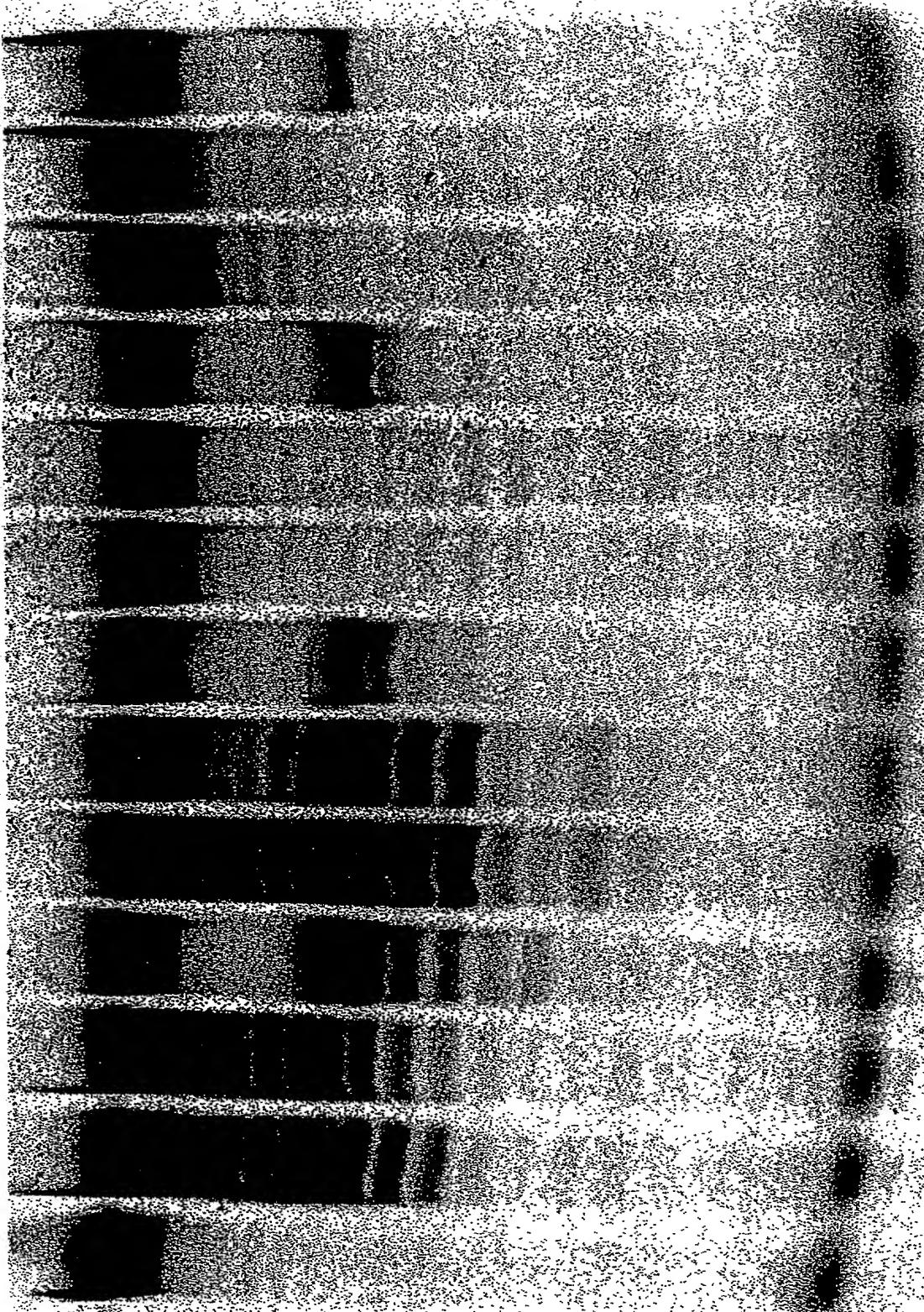
26>

45

FIGURE 34

202 T 20 " 225 4x00T

M 1 2 3 4 5 6 7 8 9 10 11 12

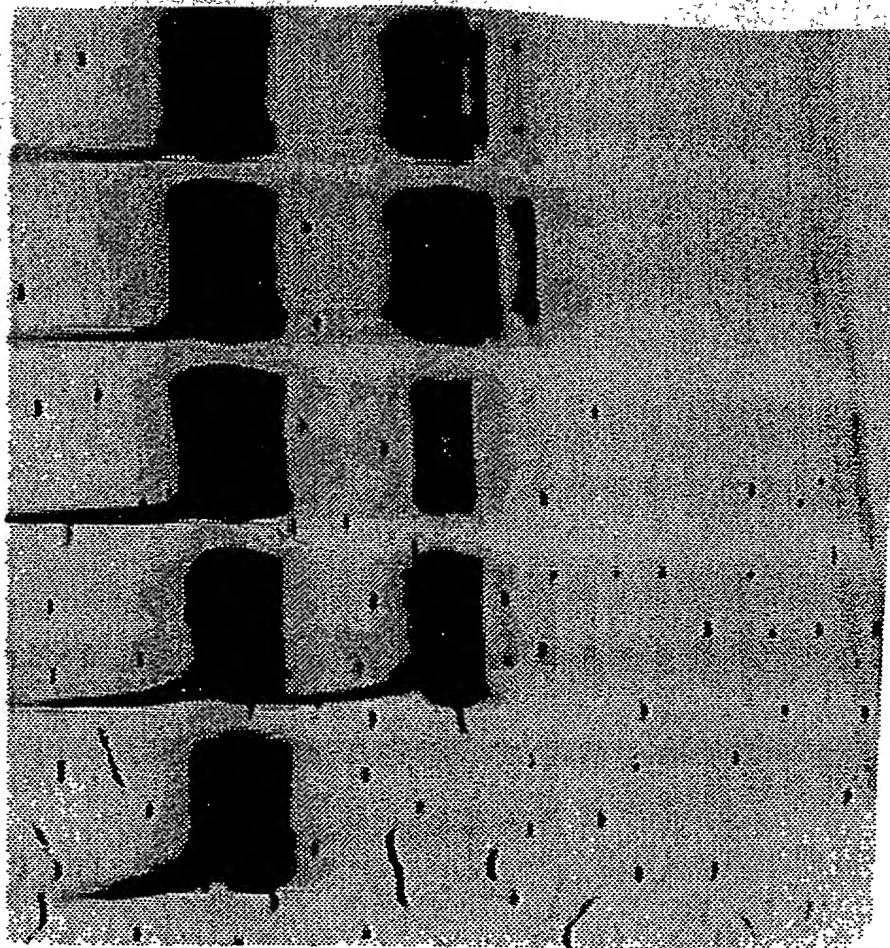


26 →

46

30 20 10 0 10 20 30

5
4
3
2
1



26 →

47

FIGURE 36
T₂ T₃ T₄ T₅ T₆ T₇ T₈ T₉ T₁₀ T₁₁ T₁₂ T₁₃

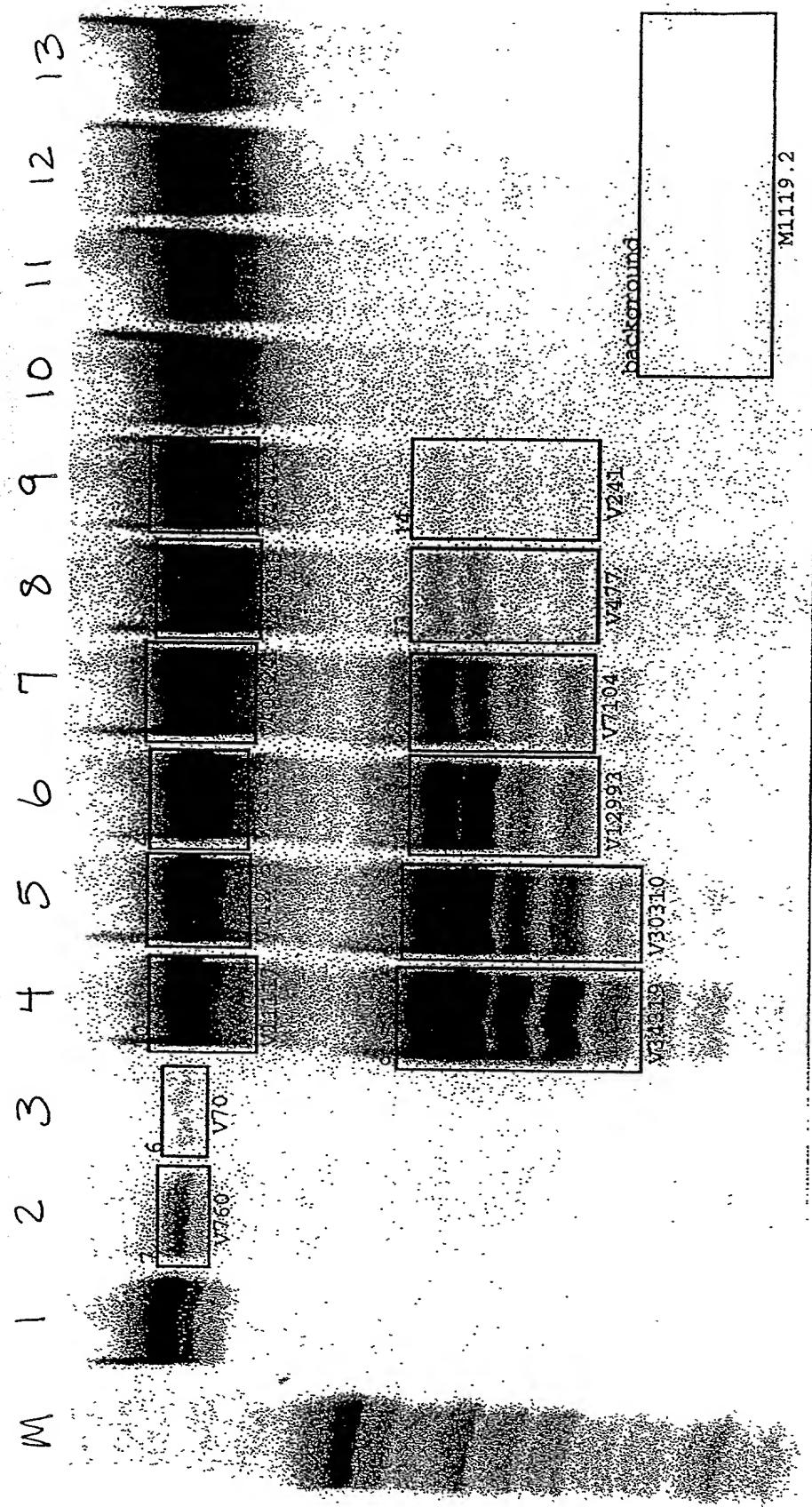


FIGURE 5,

"Tremere" Gestures

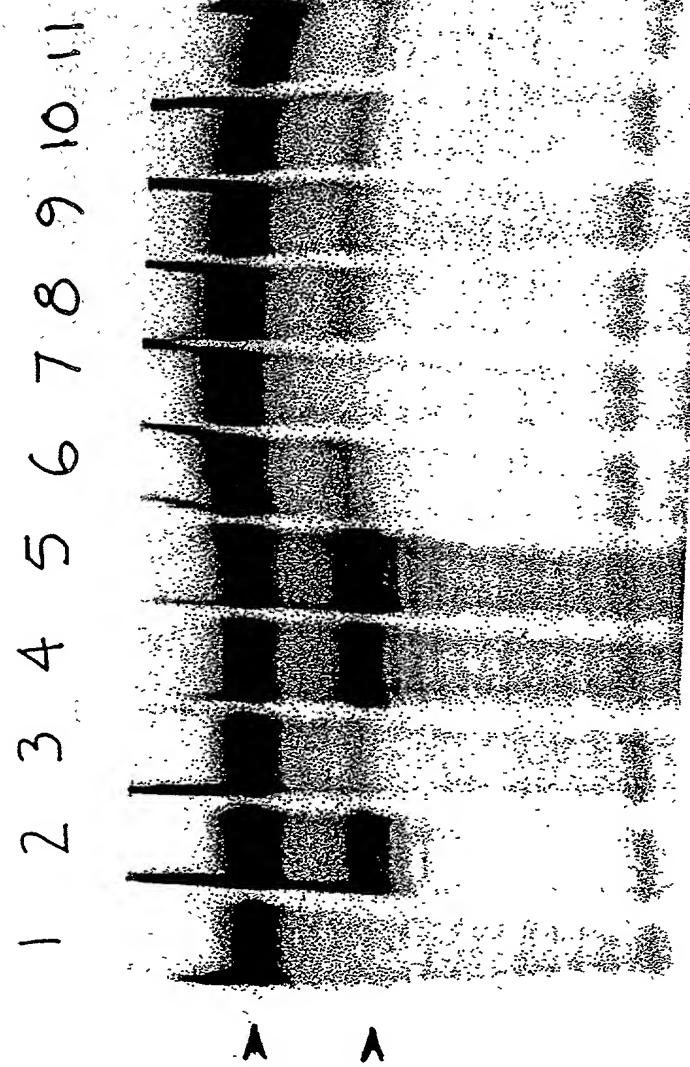
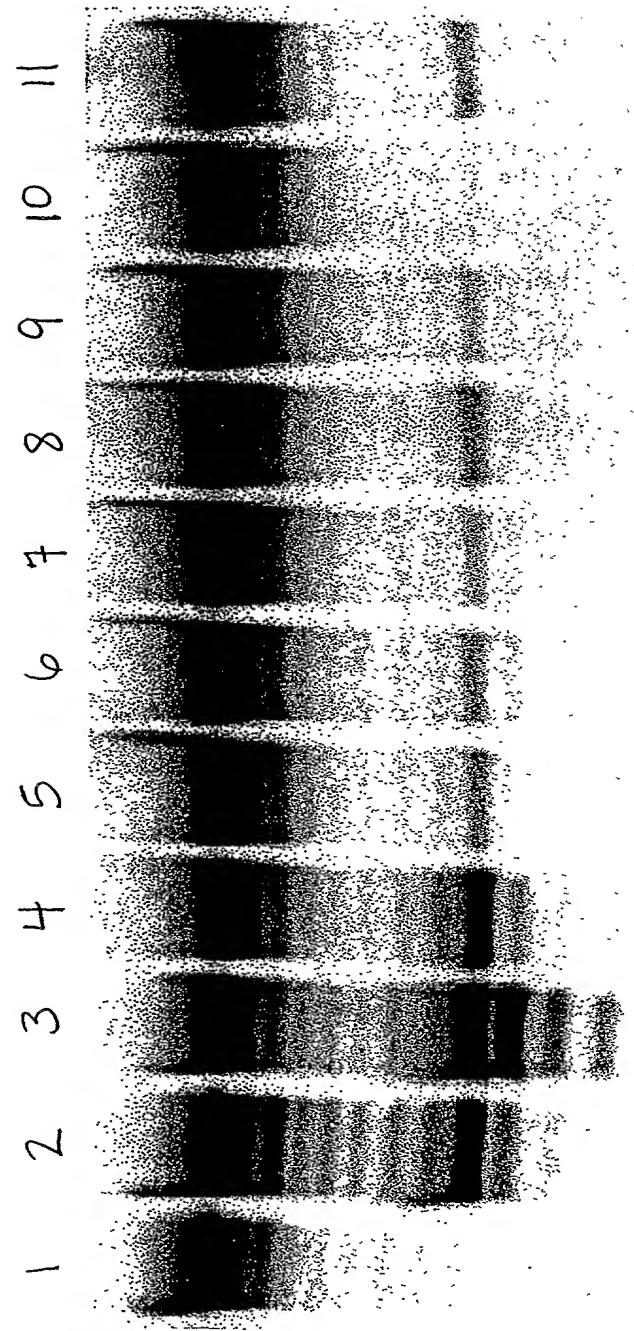
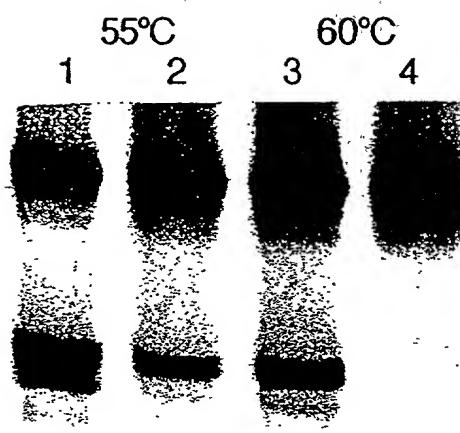


FIGURE 38 25% COT



50

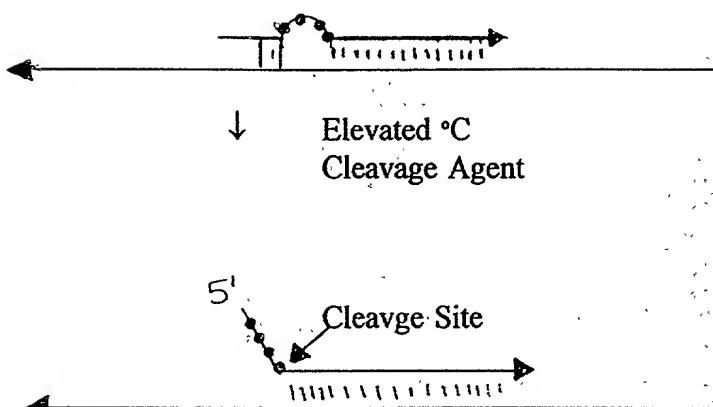
FIGURE 39



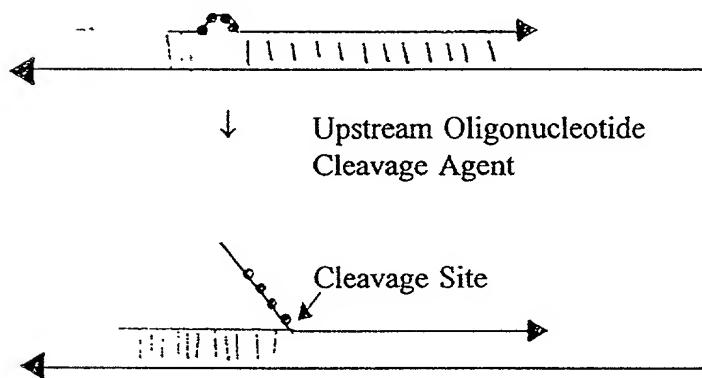
51

FIGURE 40

a.



b.



52

FIGURE 41

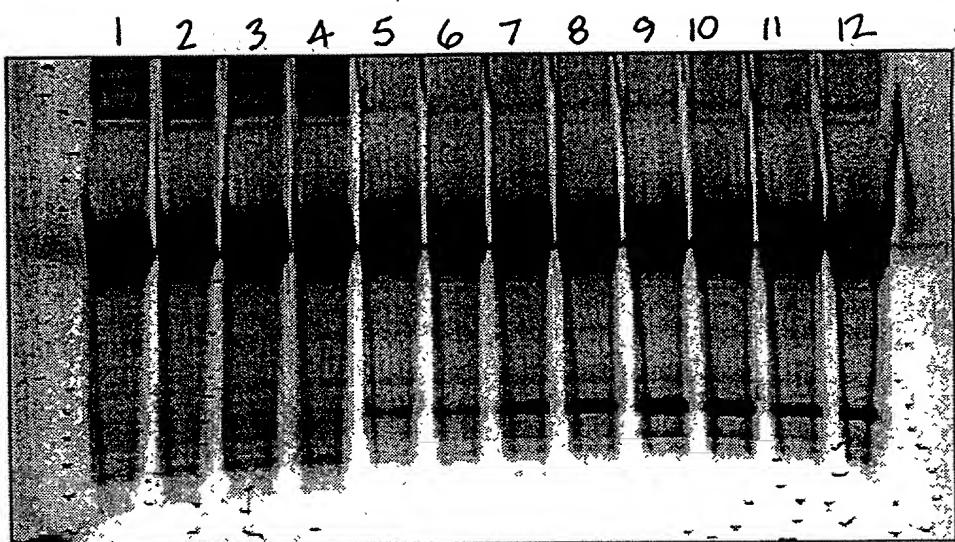
Invasive Cleavage Directing Oligo

cleavage site

A small black arrow pointing to the right, indicating the direction of the next section.

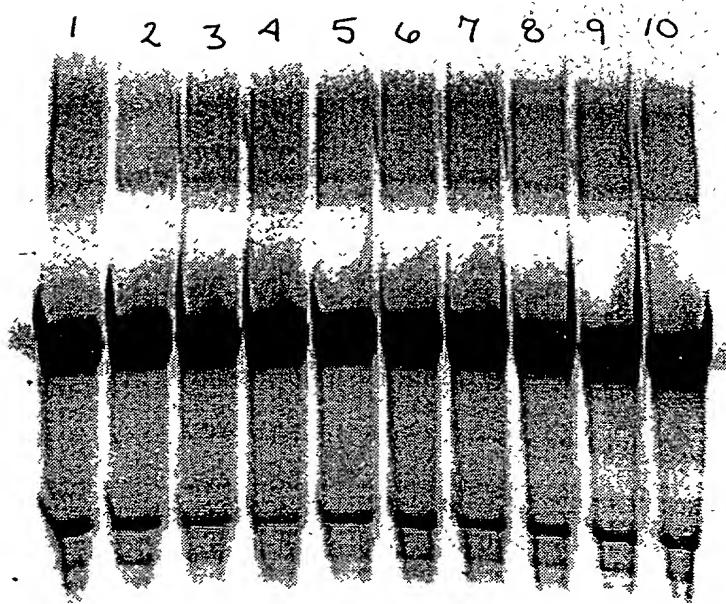
5'-cy-3' agaaaaaaA agggaaaaaggaaaaaggaa
 5'-ggccgggaaacgtggggatggaaaggaaaggatggat-3' ← Probe oligo
 3'-ctggcccccttccggccgttgtcaactttttttttttttt-5'

FIGURE 42



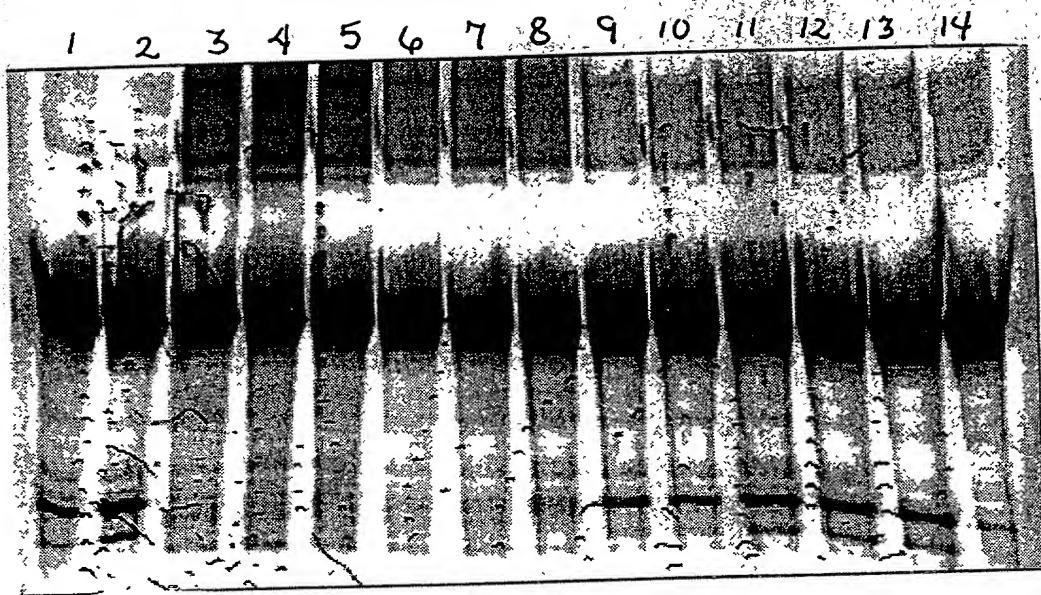
54

FIGURE 43



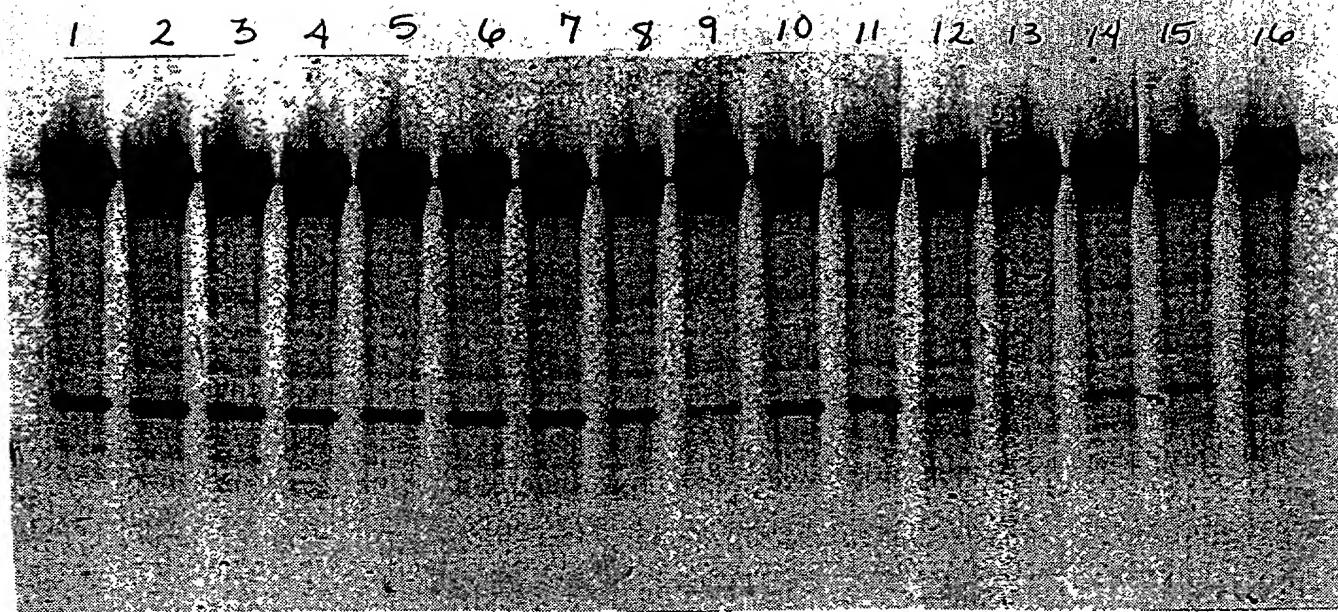
55

FIGURE 44



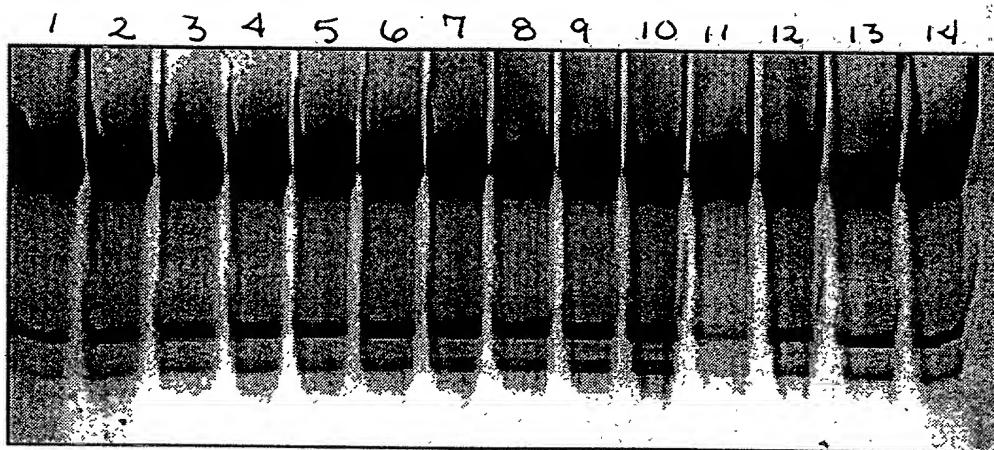
56

FIGURE 45



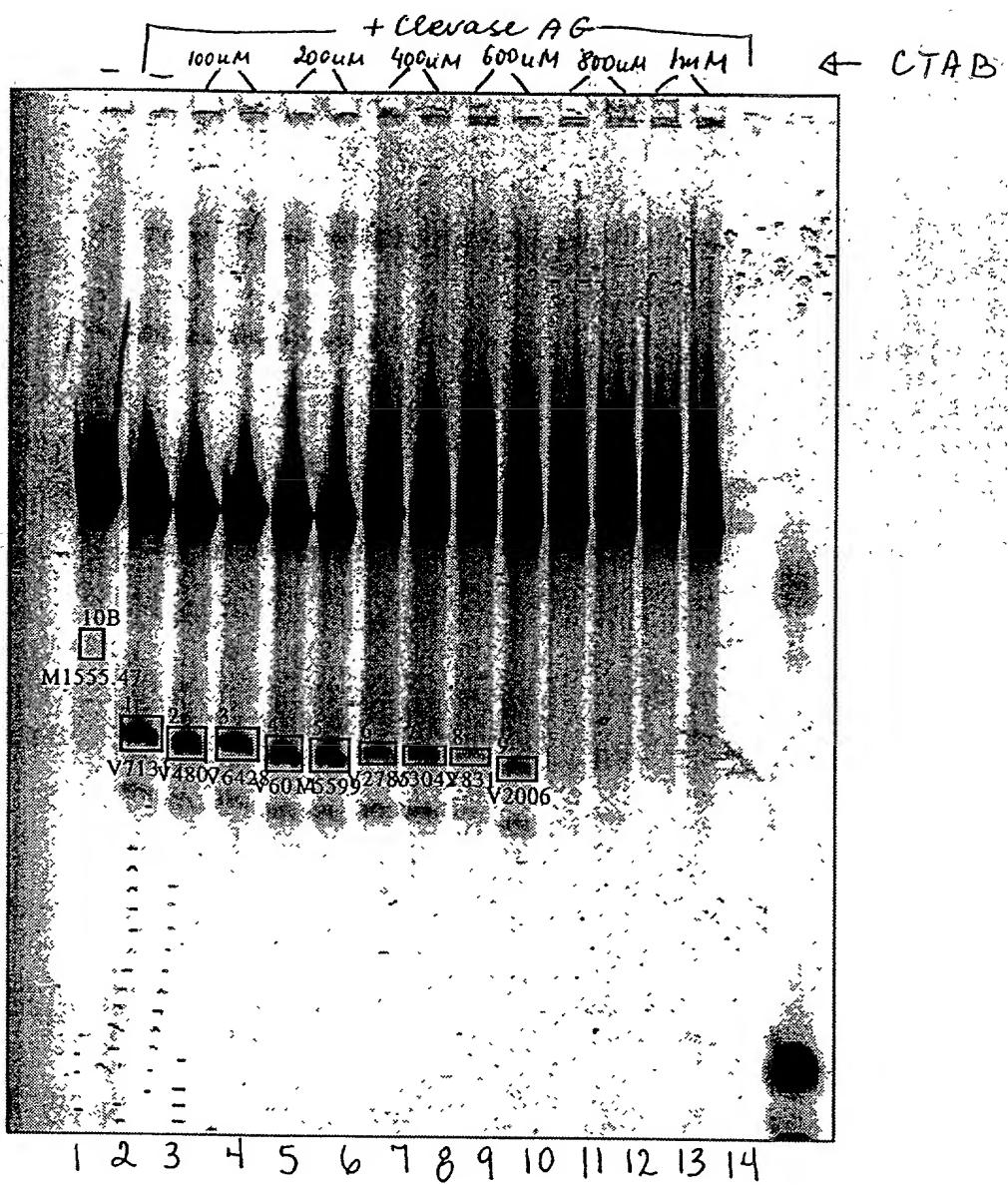
57

FIGURE 46



58

FIGURE 47



59

FIGURE 48

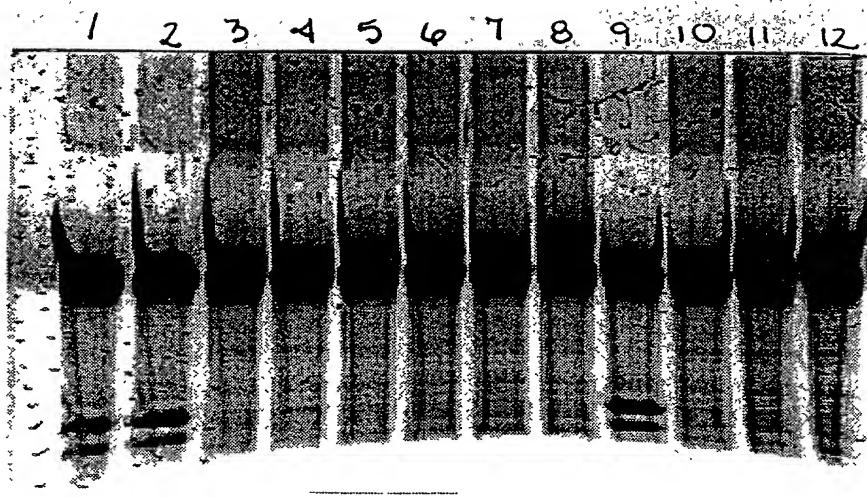


FIGURE 49

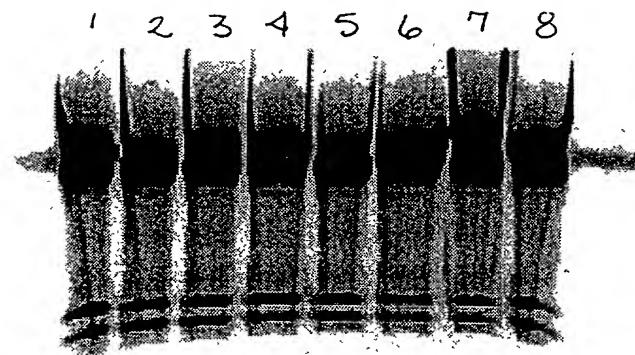


FIGURE 50

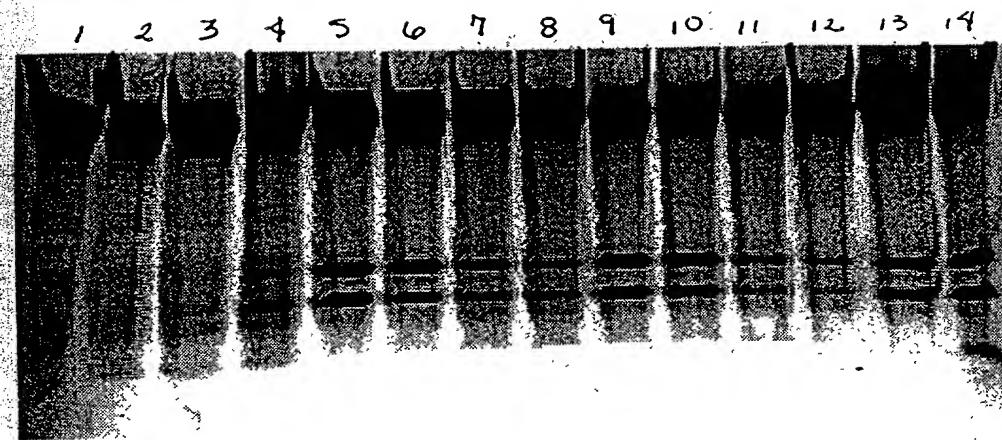
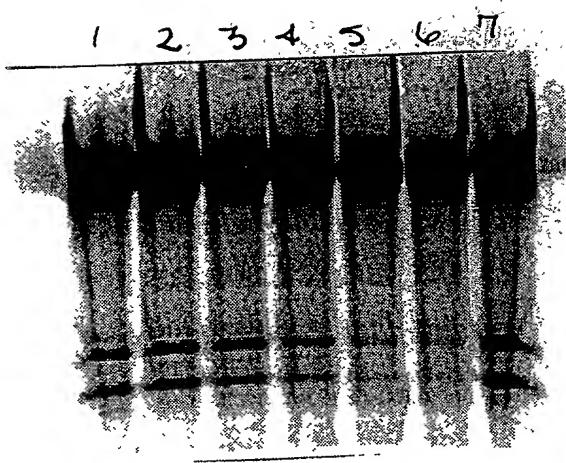
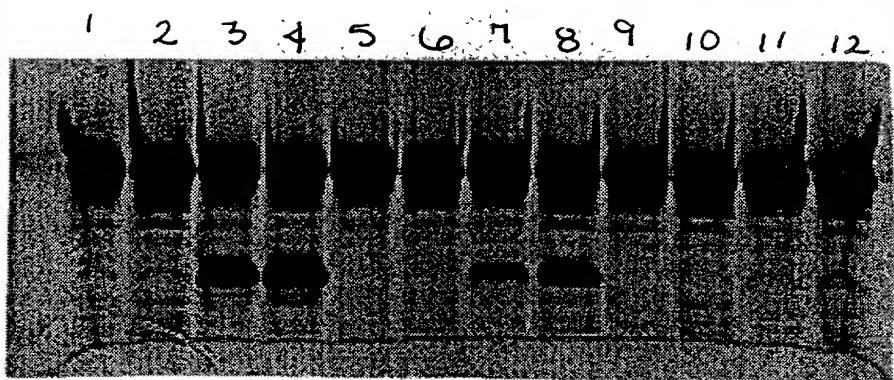


FIGURE 51



63

FIGURE 52



64

FIGURE 53

5

Target Run

Uncleaved
Proteins →

CLEARED
PROOF

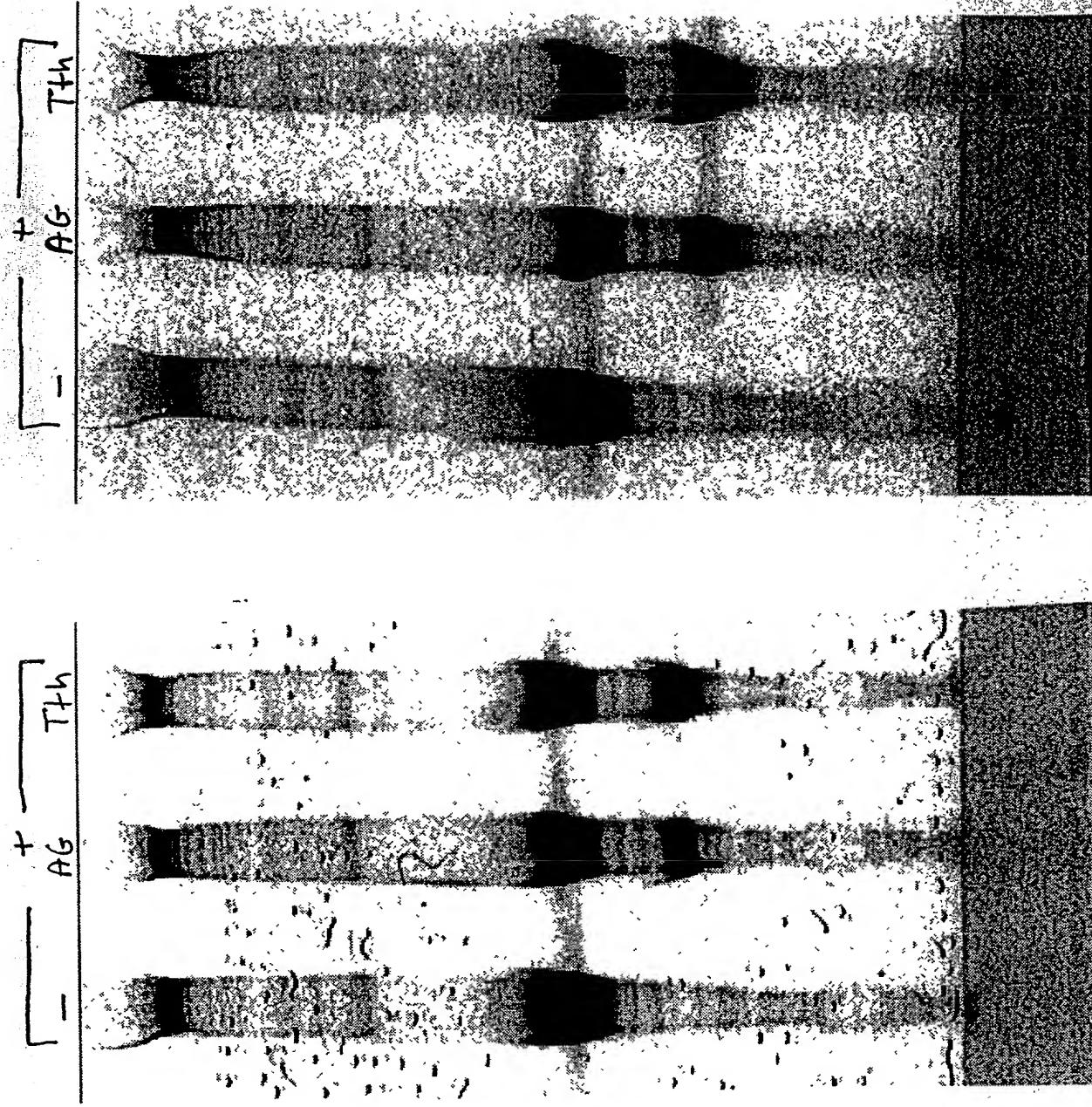
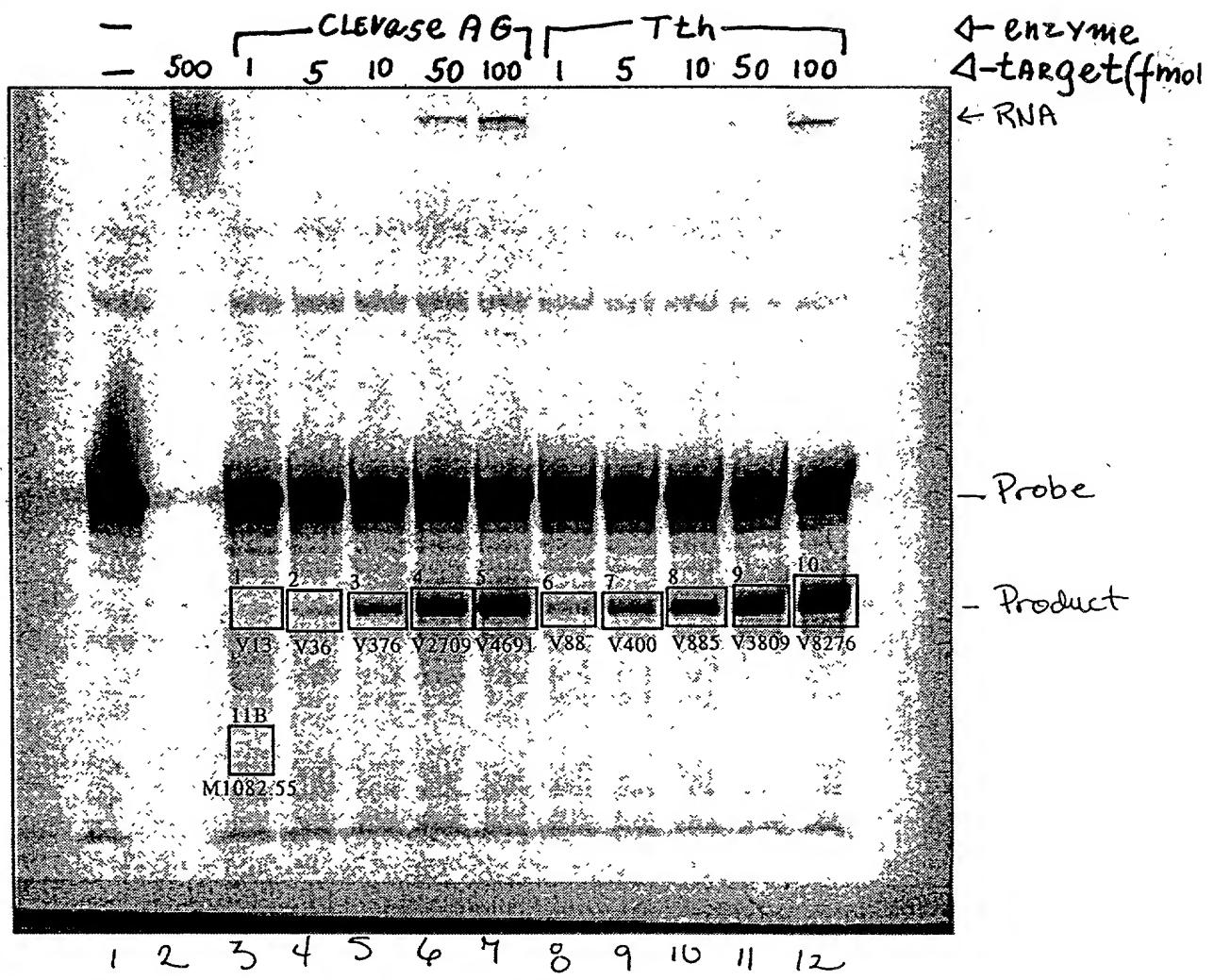
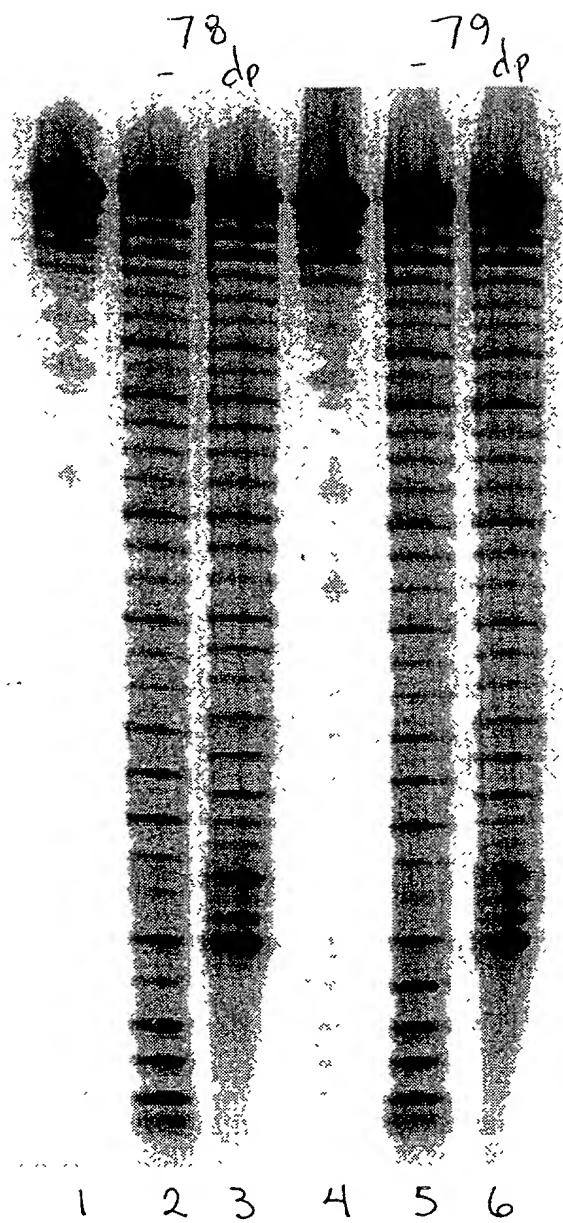


FIGURE 54



66

FIGURE 55



67

FIGURE 56

70 (C10 amino T's)
74 (C6 amino T's)

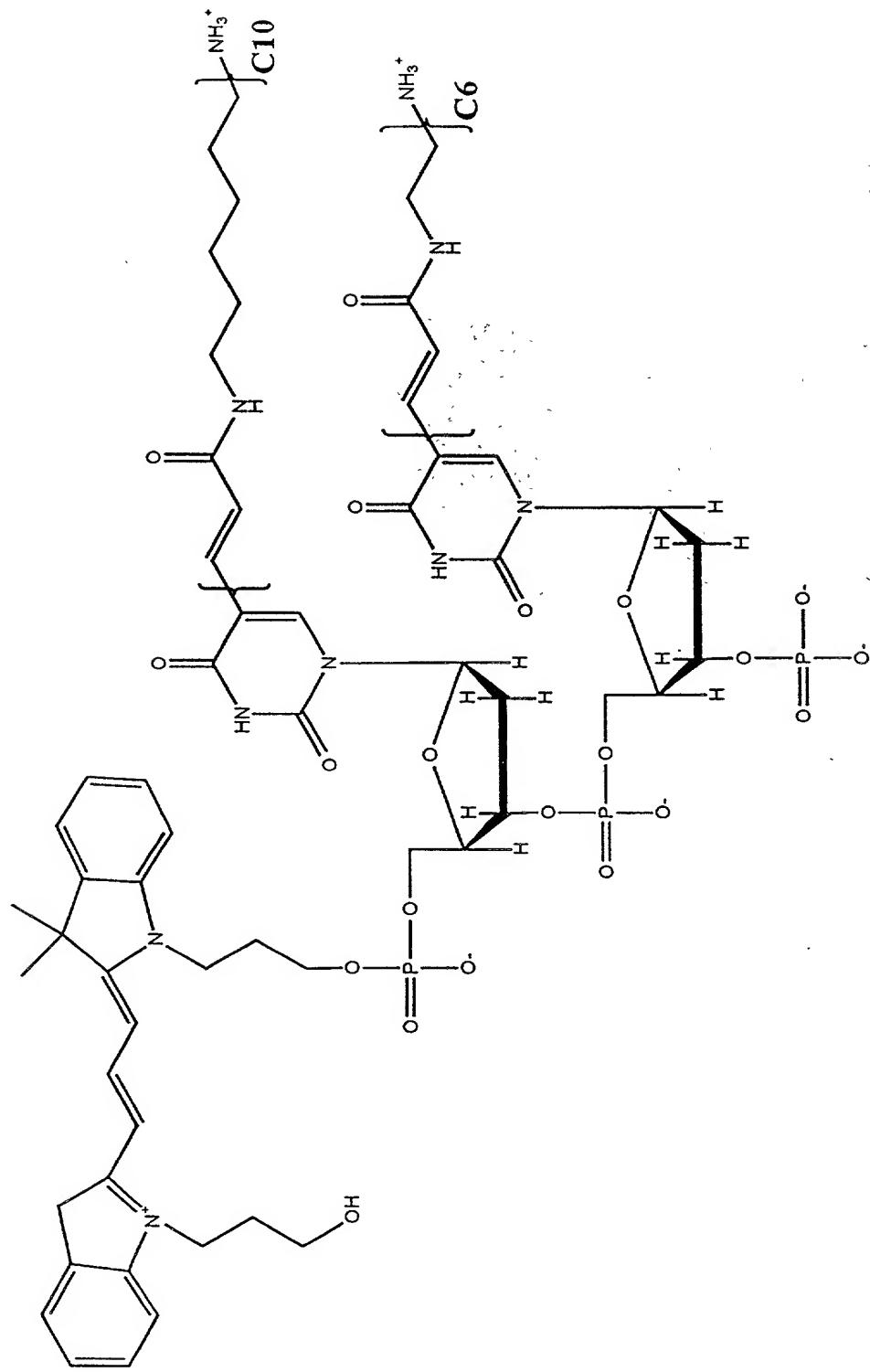
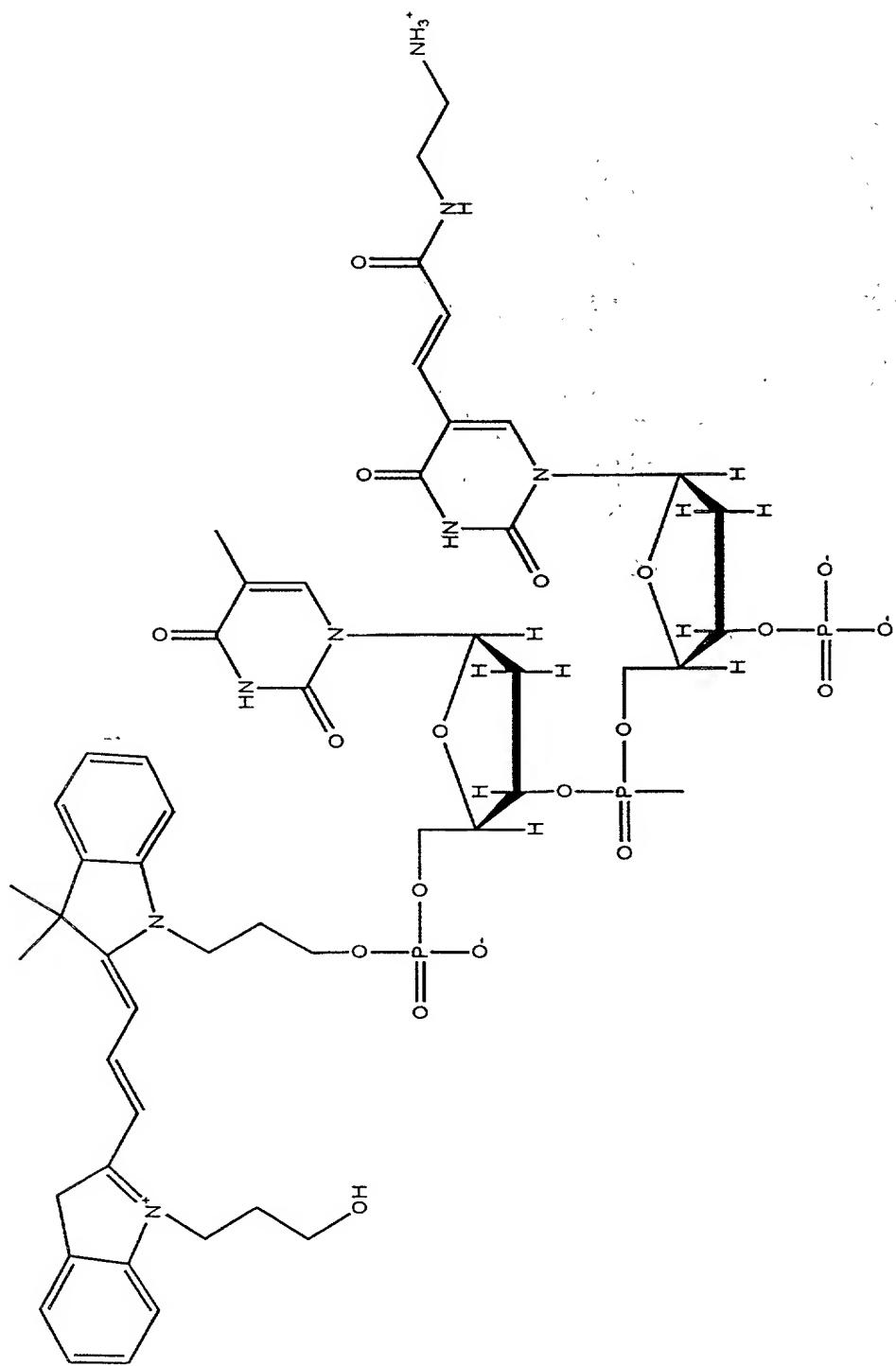


FIGURE C57 FADH₂-NAD⁺

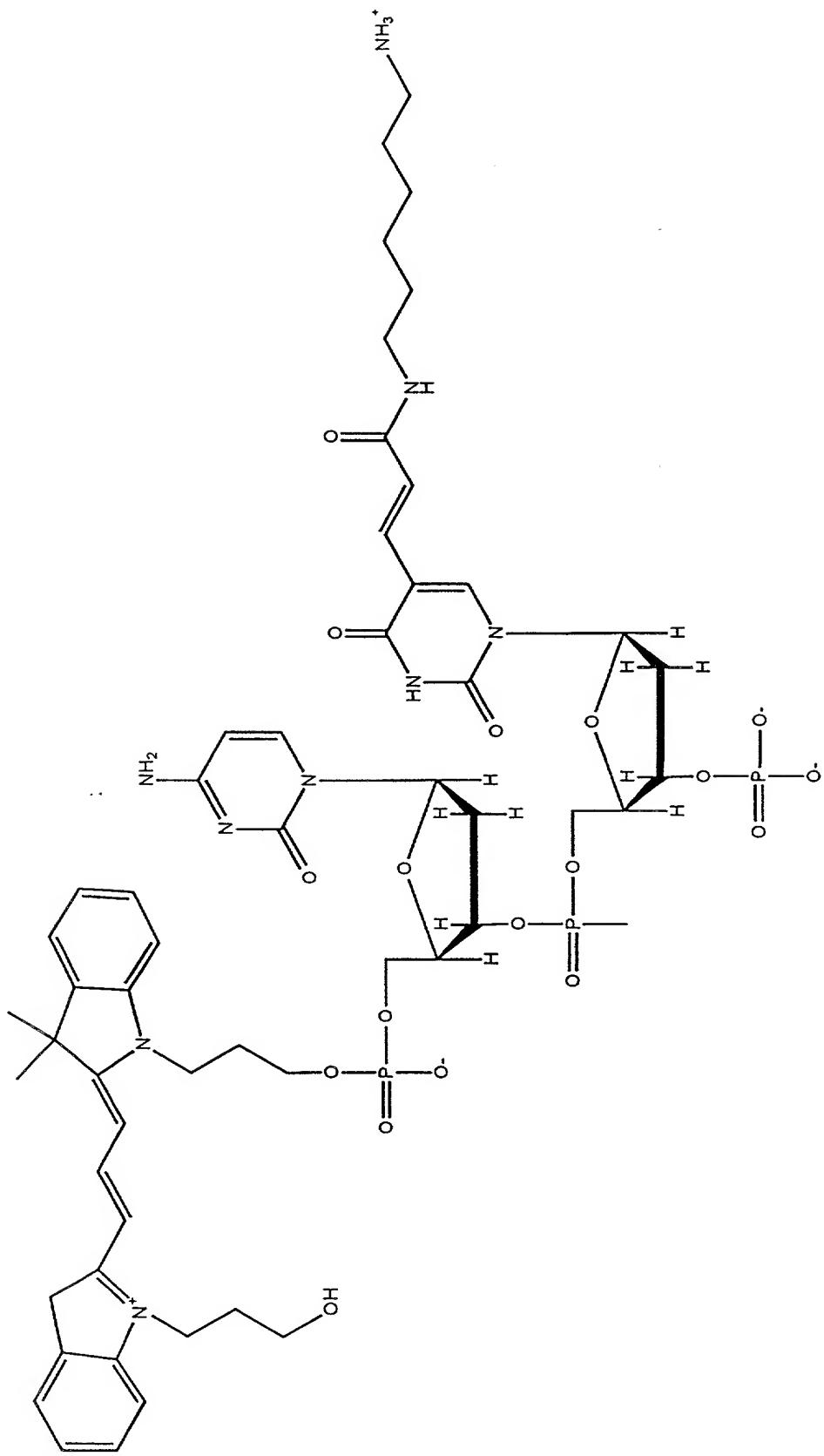
75



69

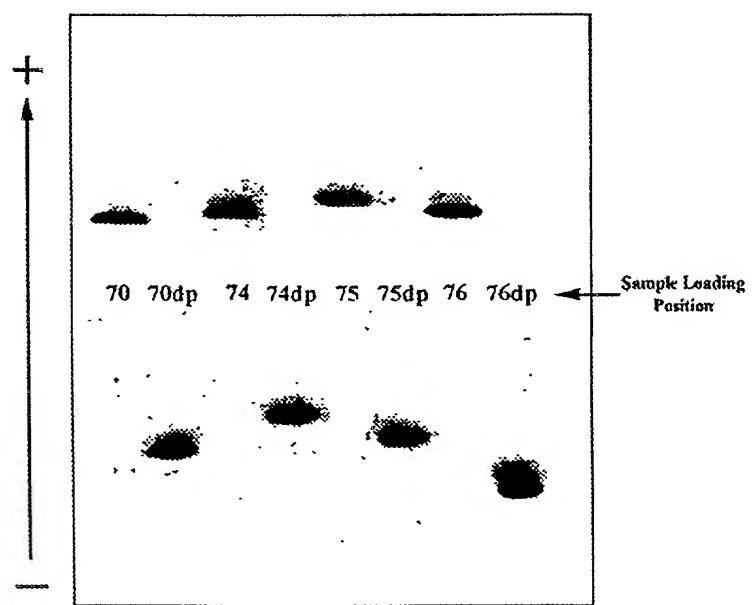
FIGURE 58

76



76

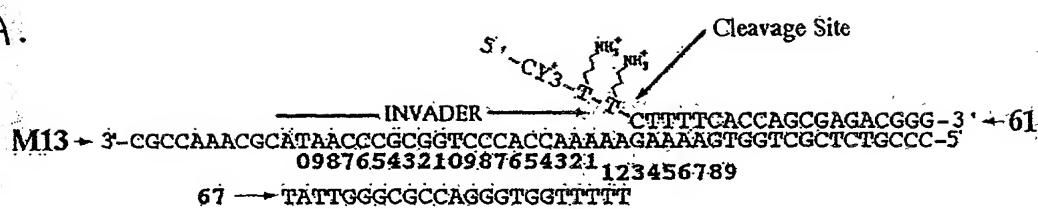
FIGURE 59



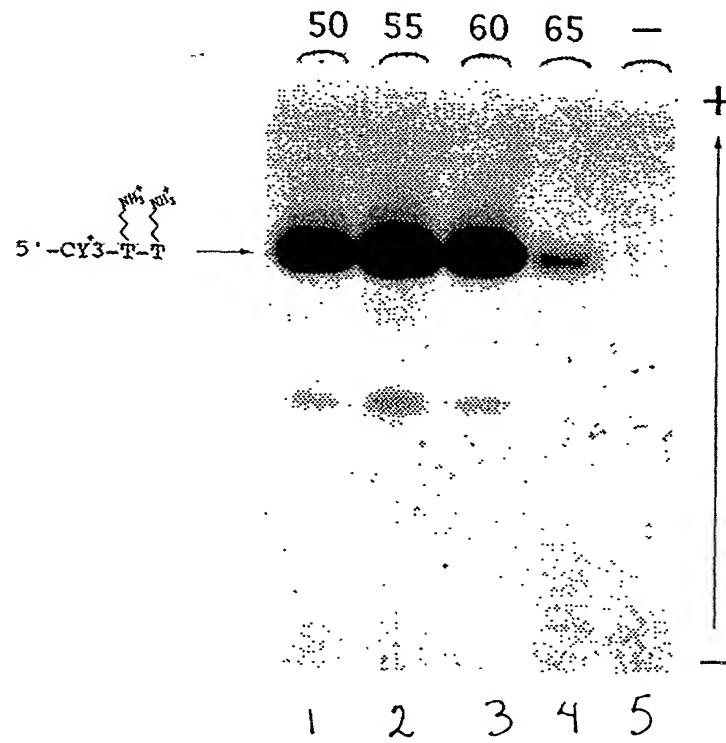
71

FIGURE 60

A.

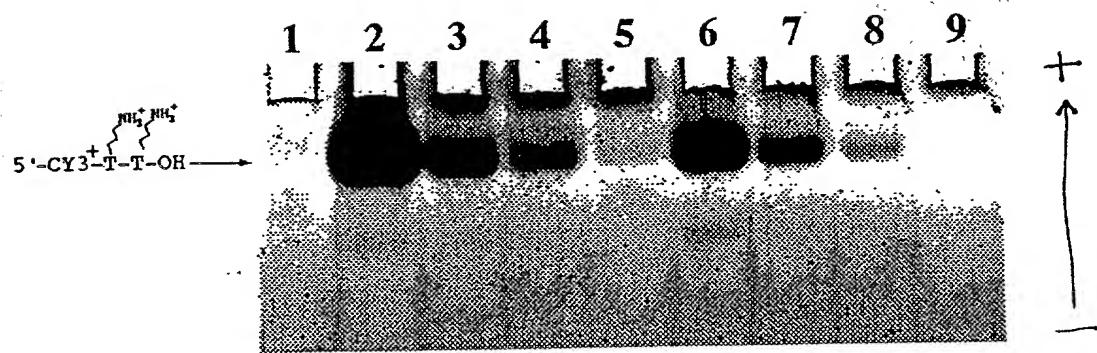


B.



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FIGURE 61



73

FIGURE 62

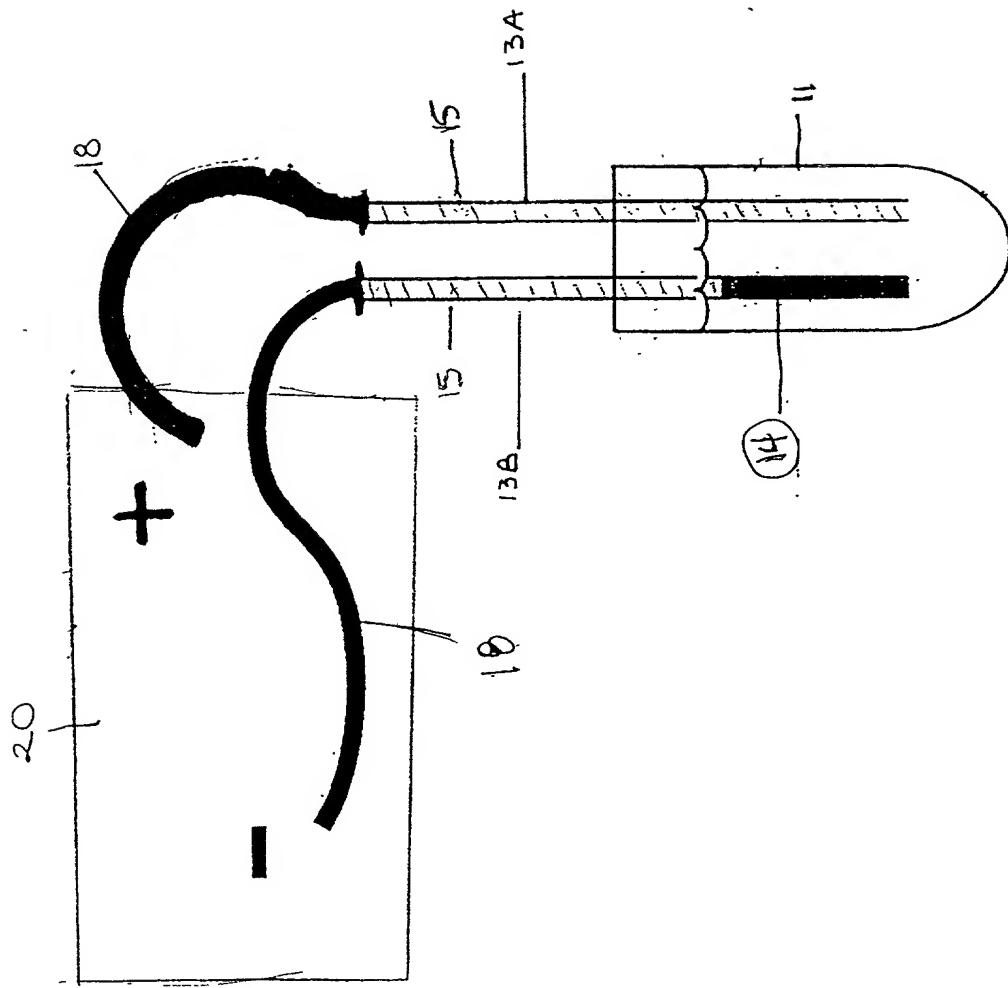


Figure 63 "Electrolytic Cell"

FIGURE 63

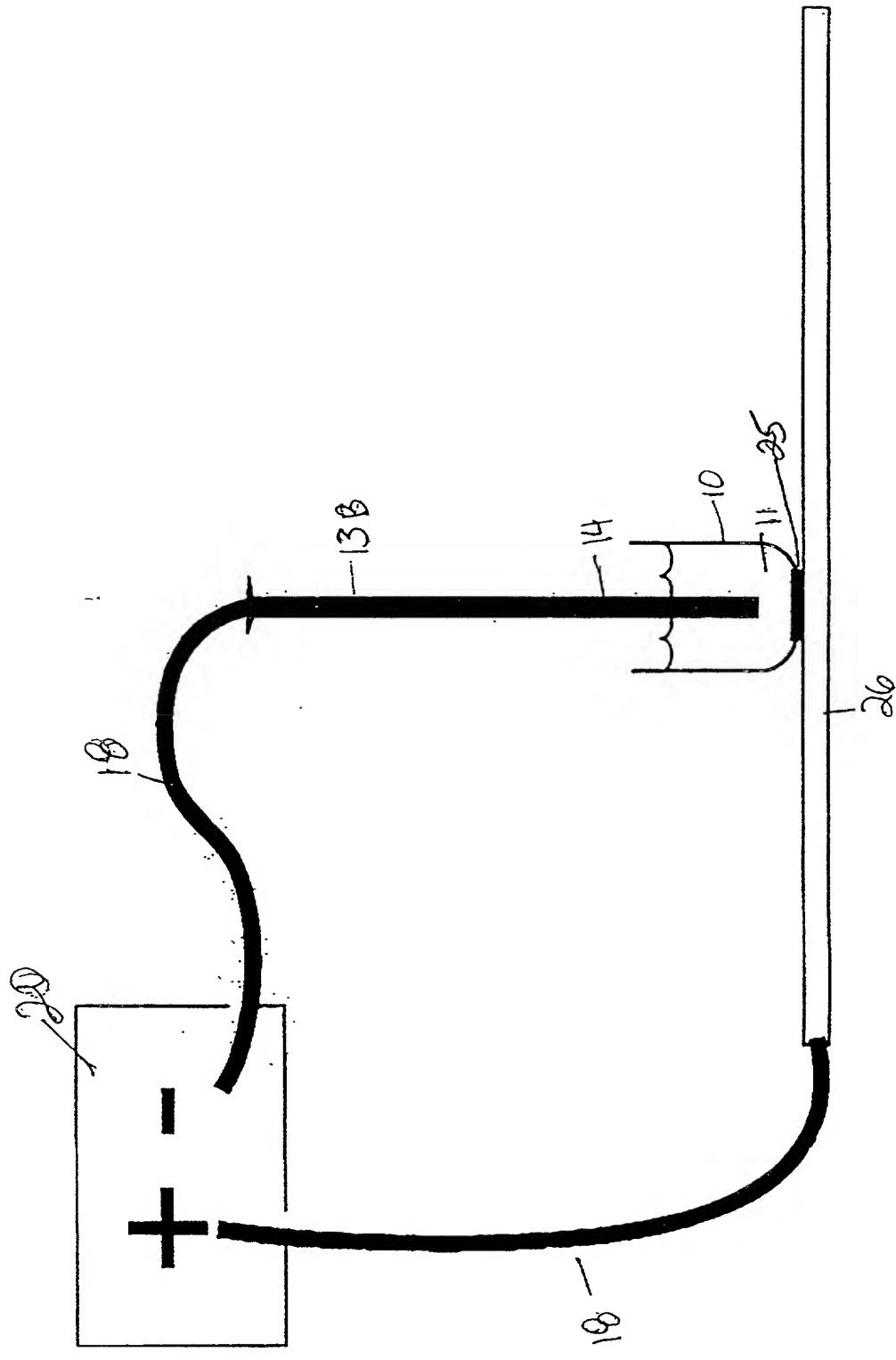


FIGURE 64

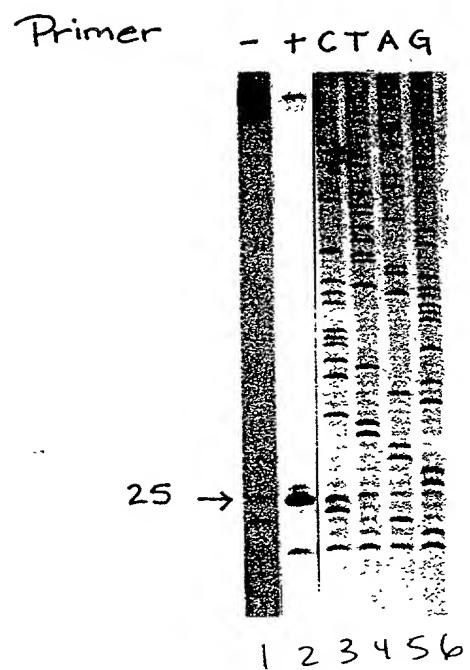


FIGURE 65

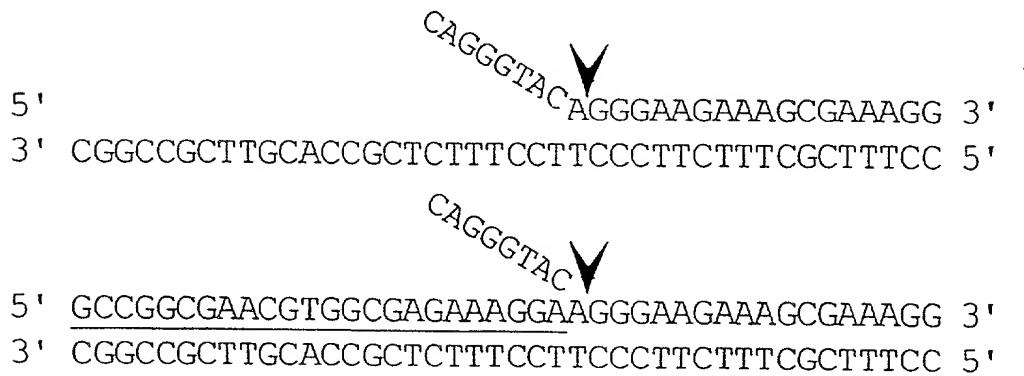
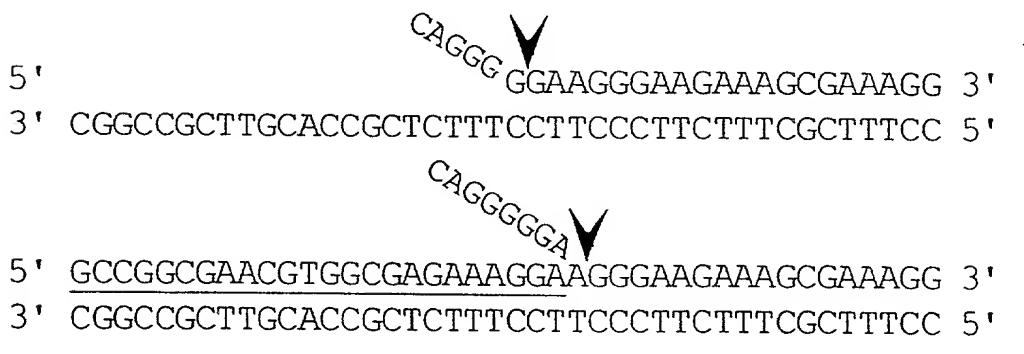
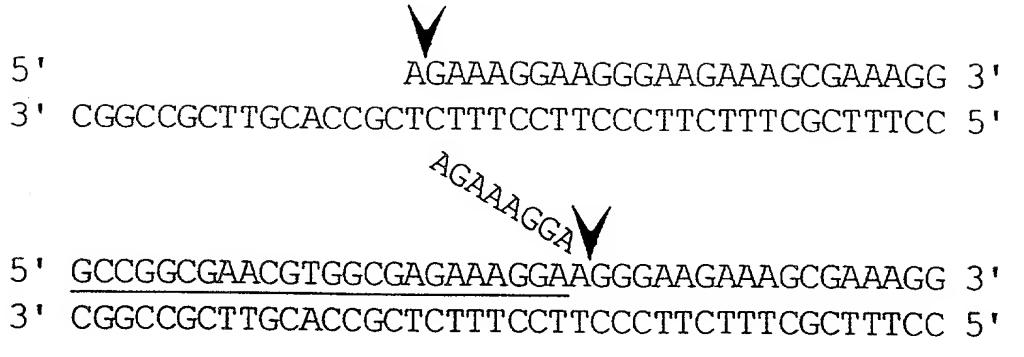
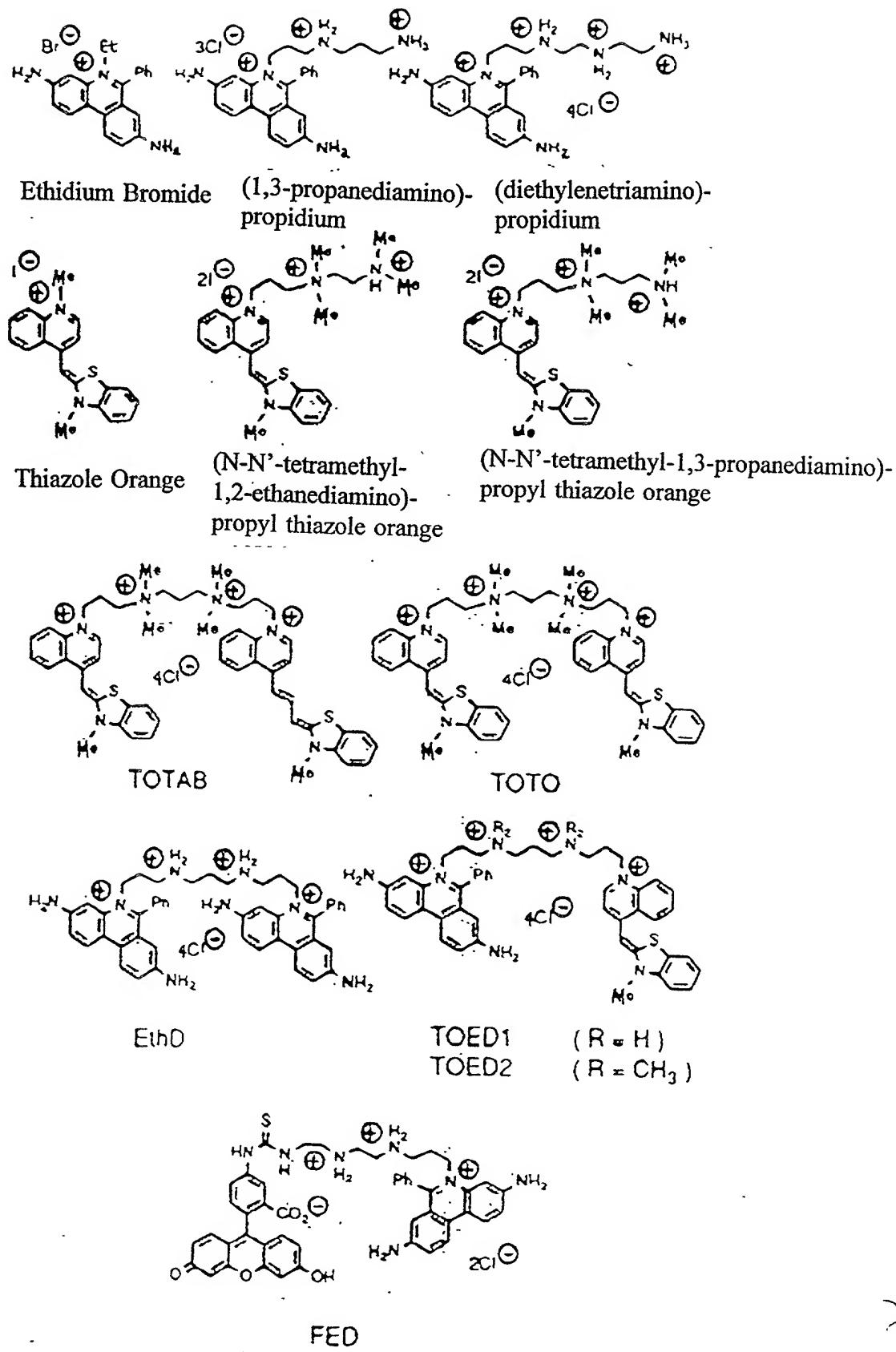


FIGURE 66



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